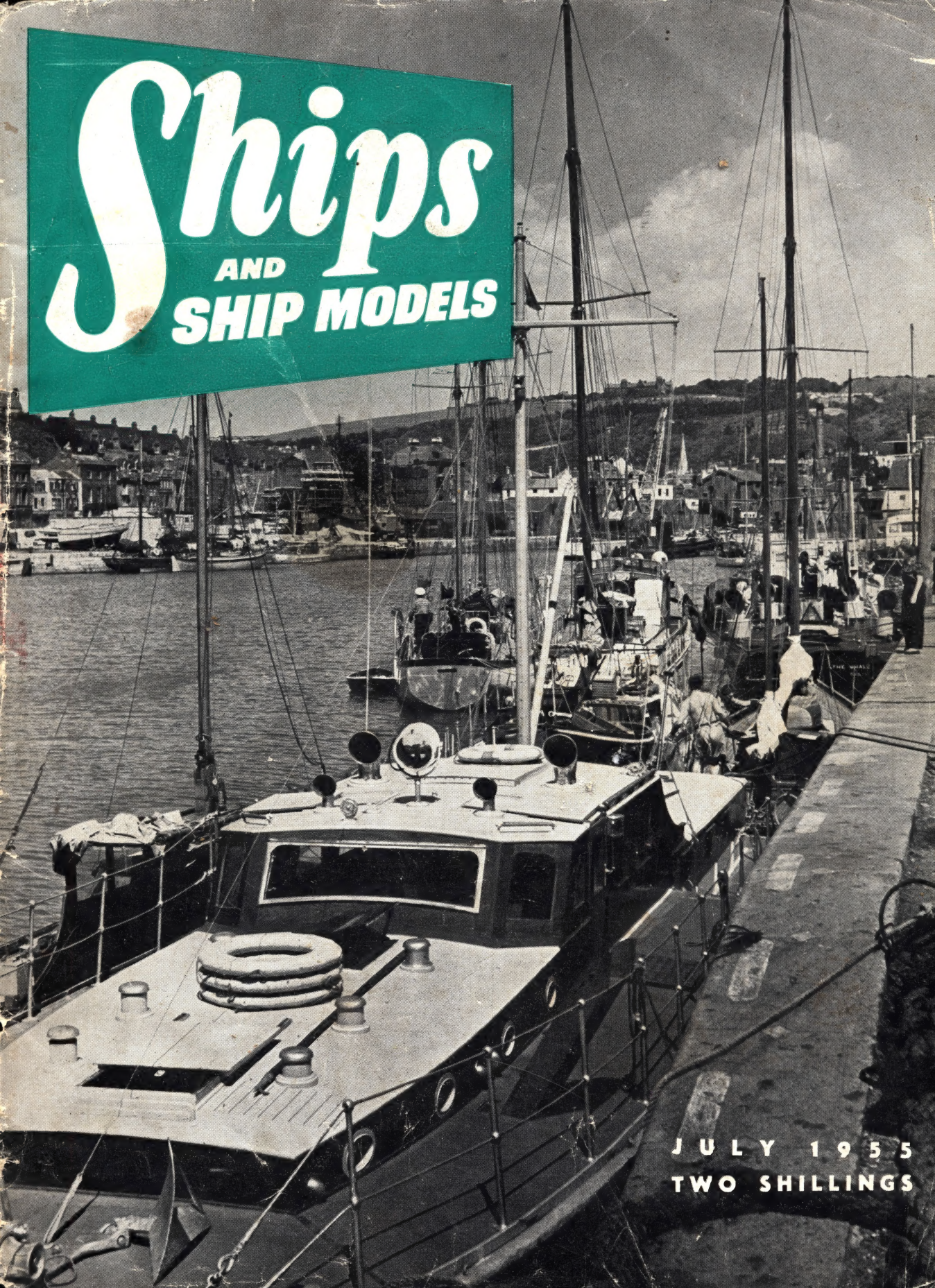
Ships AND SHIP MODELS



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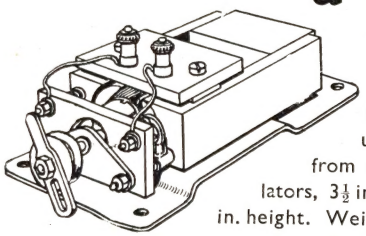

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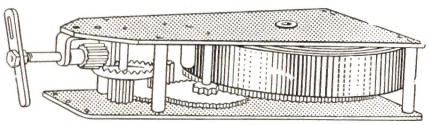

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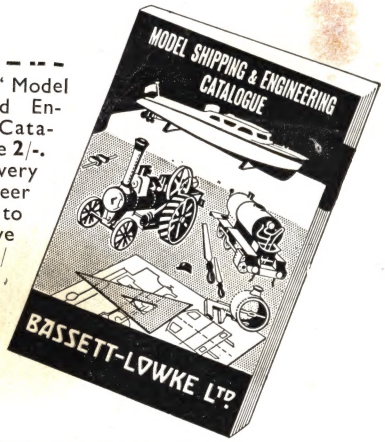

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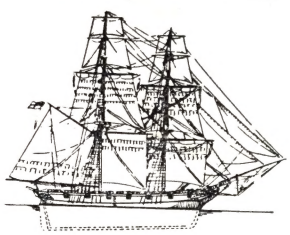

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Ships AND SHIP MODELS

INCORPORATING MODEL SHIPS & POWER BOATS

Vol. VIII. No. 90. JULY 1955

Managing Editor
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Advertisement Manager
T. C. Page

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THE SHIP'S LOG

A special exhibition was opened at the National Maritime Museum, Greenwich, by the First Lord of the Admiralty, the Rt. Hon. J. P. L. Thomas, M.P. on June 1st, in honour of the 150th anniversary of the death of Nelson. From the point of view of the student of ship construction and of the builder of ship models, the most interesting item is the number of contemporary drafts displayed on screens of the ships in which Nelson served. These include the *Badger*, his first command, the *San Josef*, his favourite prize, the *Lowestoft*, *Albemarle*, *Boreas*, *Elephant*, and, most famous of them all, the *Victory*. Other drawings show the stern of the *Royal Sovereign* and the figurehead of the *Queen Charlotte*. The flat-topped cases contain letters and documents of absorbing interest, illustrating both Nelson's public and private life. Some of these include the actual commissions authorising him to take charge of certain ships or operations. Others show his relations with his brother officers and with his family circle. In the wall cases there are some of Nelson's honours and awards recorded on vellum with heraldic embellishments. These is also a selection of the plate, glass, china and linen which he used daily in the *Victory*. Books, pictures, portraits and pottery complete what is a very interesting exhibition of our national hero, and one which is worth going a long way to see.

We would like to remind our ship modelling readers that the closing date for their entries in the competition section of the forthcoming "Model Engineer" exhibition is July 11th. In exceptional cases we may be able to make arrangements to admit a late entry, especially for overseas and sea-faring competitors, but such entries cannot be published in the exhibition catalogue. There is, of course, no necessity to have the model completed by July 11th, but, as we all know, a month soon slips by, especially during the summer, and it is advisable to have the model completed as early as possible so that one has time to live with the model for two or three weeks before despatching it, so as to be able to examine it with a more critical eye. It is surprising how one gets used to the appearance of a model during its construction, and how even glaring faults may be overlooked. If there is an interval between its completion and its despatch, these faults become more obvious and there may be time to correct them. Entries are coming in very satisfactorily and we are anticipating a very successful exhibition, with an even better display of ship models than is usually the case. Readers who are not ship model makers, and who have perhaps never been to our exhibition, (dates : August 17th to 27th) would find a visit a very rewarding experience.

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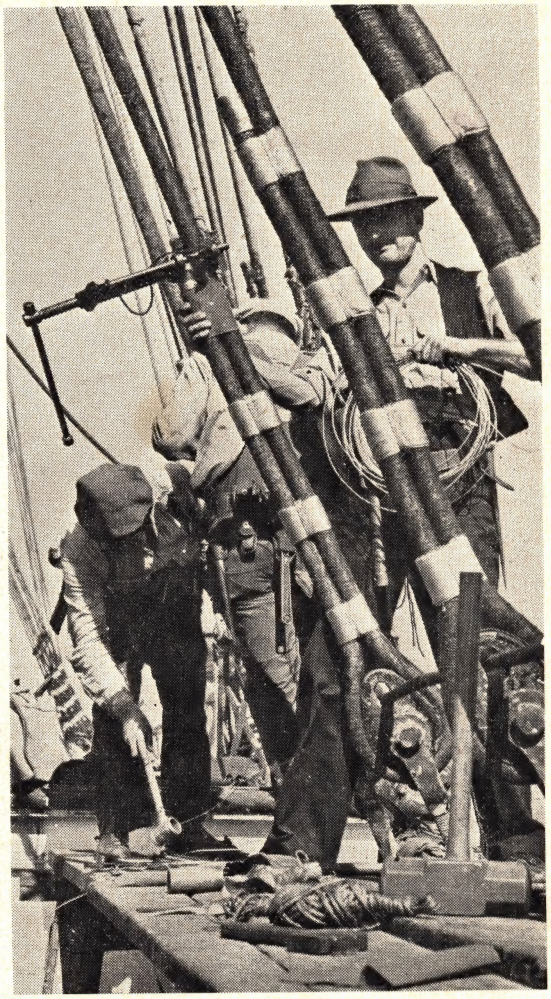
*THE FULL-RIGGED SHIP

IT is proposed to bring her back quite close to the fishermen's wharf, but since she is now a project for the benefit of San Francisco and not the personal profit of a promoter, the project has the blessing of the civic authorities and she will get the berth, parking problem or not.

The *Pacific Queen's* showman owner died a year or two ago and the ship was towed away to that graveyard of so many of her kind, the Sausalito mudflats in San Francisco Bay. There she might have rotted if it were not for the San Francisco Maritime Museum, a new project, and above all the youthful director of that museum, Mr. Karl Kortum. Always interested in sailing-ships, Director Kortum had seen service during the war in the American barque *Kaiulani* (which really was the last American square-

* *Concluded from June issue page* 184

The old Scots ship "Balclutha" as the "Star of Alaska" off the Golden Gate, San Francisco



Skilled riggers put new seizings on the few good shrouds. All other standing rigging was renewed

rigger to fly the Stars and Stripes, for she was built on the Maine coast and had also been brought up in the Alaska Packers' fleet) which made about the half of one voyage having crew (or possibly officer) trouble in Hobart Tasmania, and then going off as a hulk to the Solomon Islands and New Guinea. First it was proposed to restore the *Kaiulani*, but she was not available. The *Pacific Queen* ex *Balclutha* was available and, though the friends of the museum had to pay through the nose for her, she was acquired. The price was reported to be

'BALCLUTHA'

By ALAN VILLIERS

Labour, paint, red-lead, berth for the ship—all were free

$25,000. The $5,000 paid for her some years earlier was, at the time, the equivalent of about £1,250, but the $25,000 was worth over £8,000.

When the *Balclutha* was purchased she had not seen the inside of a dry-dock for many, many years, and she was accordingly taken on an option subject to dry-dock examination. The condition of the old hull below the waterline proved to be very good, and the deal went through. There remained the problem of restoring the ship to her original condition and making her fit for the next 25 years or so. First, she was rigged down, and then the hull was sand-blasted. The sand-blasting blew more holes than enough in the hull above the waterline but most of the plates were all right, and those which were not could soon be repaired. The rigging was in poor shape, and the heavy wire backstays and shrouds of a Cape Horner cost money in these days. If the entire reconditioning of the old ship had to be paid for in cold cash, she was out of business. After all, the interest in her preservation was a specialised interest and, while she was stuck away out of sight at an Alameda shipyard, she had little interest for the general public. The fascinating maritime side of the San Francisco story is commonly neglected even within the Golden Gate itself, and for a while it seemed that the project of restoring this last survivor of the port's once great sailing fleet would languish and die for want of funds.

In these circumstances, something happened which is unique, I think, not only in the United States. Despite the fact that San Francisco is notorious for serious labour troubles—most of which originate on or round the waterfront—*every* waterfront and ship-repair union in the place rallied to the cause of the old ship and the whole lot of them donated the willing services of their most highly skilled members to get on with the *Balclutha* job.

When I went aboard at Moore's shipyard on a February day, the work had already been going on for months and it was still going on. Tough union organisers—and around San Francisco they have to

The for'ard deck house is under repair. The old donkey boiler has been taken out. Skilled tradesmen work for nothing

be tough: it is not a pose—were supervising the intricate work of re-rigging the vessel, alongside the museum director himself and a group of marine superintendents and shipping managers. Shipwrights, carpenters, welders, painters, caulkers, riggers, joiners, sailors, ship fitters, boilermakers and just plain labourers milled about, half a hundred strong, on the decks, below the decks, on the quay alongside and in the rigging. It was a bright, sunny Saturday morning, their weekend, and the only return the job offered was a morning break of coffee and sandwiches—that, and the men's own satisfaction.

American union conditions have made American ship-repair costs so great along the Californian coast that about the only shipowners who can normally afford to employ such workers are the government and its agencies. But these men were working for nothing, and happily working, alongside the boss and the representatives of the alleged plutocrats. It was a fine sight, and I stood there on the poop of the old full-rigger a long time, watching those brawny fellows going about the job. They knew how to work, too, and the head rigger was an expert at his job. All the yards were down and being repaired (a big dockside crane had been a help) and almost all the standing rigging had to be renewed. Half the bowsprit was rotten and a new half was welded on. A large plate in the starboard bulwarks had to be cut out and renewed. There was an immense amount of skilled joinery and shipwrights' work to be done. San Francisco is perhaps the best place in the world, outside Mariehamn and perhaps Hamburg, to recruit men skilled in the sailing-ship business, and the *Balclutha* had an excellent and an expert team. Nor were they all elderly, by any means. The head rigger was a comparatively young man who had sailed as mate in American square-riggers, including several of those lovely white barquentines which used to be in the Australian and the South Seas islands trades.

When there was any temporary shortage of riggers or wire-workers, an appeal was promptly printed in the daily papers and along came the skilled men. While I was there three new men showed up in response to such an appeal—a couple of coast guardsmen from the old ice-breaking auxiliary barque *Bear*, and a sailor from the five-masted barquentine *Forest King* which I remembered in Melbourne as a boy. These three brought the total number of volunteers at work that morning to forty-five, and I saw more in the sheds where the yards were being scraped and red-leaded. Finding enough wood caulkers was a bit of a problem, but ten old-timers were rounded up. The art of wooden deck caulking is not much used round San Francisco Bay these days, and all these men were past sixty. But the old-timers worked with a will and they finished the whole of the starboard side of the deck by noon, in and under the flywheels of the main pump and around the pump well. These are awkward places to pay and caulk.

A good part of the material required to make the ship over has been donated, too—even the coffee for the morning breaks was a gift. So were the berth and all the facilities that go with it—the welding plant and the air and petrol to drive it, the crane, the sand for the sand-blaster and so on and so forth *ad infinitum*—and whatever tugs were necessary. All sorts of firms had rallied to the *Balclutha's* aid—pattern-makers maritime lawyers (to look after the very necessary paper side), lumbermen like Weyerhaeuser's and Pope and Talbot's, truck-owners, rope works, wire-makers, paint-manufacturers, surveyors, customs brokers — to mention only a few. Of course, some funds had to be raised. Director Kortum was looking after that and was quite optimistic.

When the *Balclutha* is ready, which is to be some time this summer, she will be berthed near the San Francisco Maritime Museum, hard by the fishermen's wharf. There her masts and yards will tower above the waterfront as those of so many of her sisters used to do. She will serve to remind

(*Continued on page* 226)

A society meeting in 1951. *The photo shows several familiar faces*

THE SHIP MODEL SOCIETIES . . .

BIRMINGHAM

By Jason

TOWARDS the end of 1937 I had a letter, with photos, from Birmingham. The writer reminded me that I did not seem to have a very high opinion of galleons. He asked for my advice and he begged me to state it quite frankly. *Should he continue with a galleon? He had already got the hull well advanced. It was a timber and planking job. Here were some pictures of the work in hand.*

I remembered meeting him at the " M.E. " Exhibition that year and I had some recollections of our conversation. Naturally, care must be taken when pronouncing upon a spoken description. But the photos undoubtedly showed evidence of good craftsmanship in wood. I had no hesitation in advising him to go ahead. He did—and won a championship cup thereby. The writer of the letter was Mr. A. E. Field.

In the same letter he referred to our conversation about the absence of a ship model society in Birmingham. But, following some further correspondence, a society was formed in Birmingham a few months later—in 1938. There were only three present at that first meeting: Messrs. A. E. Field, A. Keeley and A. N. Other. Mr. Field is still a member of today's flourishing society. The outbreak of war stopped activities but by Christmas, 1946, a " foundation " meeting had been held, with eight persons attending. Since then, Birmingham has not looked back.

Birmingham are great rivals of the Sheffielders. They should be very much alike, but they are not. So far as actual production of first-class models is concerned, Birmingham, for some years, have swept the boards at the *MODEL ENGINEER* Exhibition. They are strong in Sail, yet their steamers have won cups. As woodworkers they are second-to-none, yet metalwork on their models equals the best in the country. There is a very powerful team of excellent and active ship modellers. Such names as Field, Pariser, Clarke and Judd are well known in the places where ship modellers foregather.

Like all well-balanced societies Birmingham has several artists. One of them numbers heraldry among his special interests. The present secretary is a retired sea captain though still a comparatively young man. His job calls for a great deal of tact and a certain amount of firmness. The Birmingham club's membership is very mixed in active and passive modelling. Indeed, a number of them confess to being non-modellers. However, all without exception are ship-lovers and sea-lovers, and, on their meeting nights, the huge committee table is a sight for ship-lovers, being crammed with models. I wonder if the strength of the Birmingham society lies in the very fact that there are only a dozen or so modellers who are active, while the rest are ship and sea-lovers?

I was very fortunate in being given one of the society's statistical membership lists. I can recommend this idea

to all secretaries. This folder shows no less than nine columns. The first three, of course, are for name, address and telephone. Following these are other societies, model interest and modelling activity. Many of the members are in other societies, such as S.N.R., local engineering and various works clubs. The model interest is extremely varied, and where there is the remark " all types " this usually carries with it no modelling activity. Among the interests, I saw such remarks as Bombay-built, coastal craft, native craft, non-working models, power boats, diesel tugs, etc.

The modelling activity explains itself, yet 25 per cent. confess " none." But all have many books on ships and the sea. The secretary has a complete list of books held by members. It is astonishingly wide in scope.

The last three columns are the most interesting and are headed nautical interests, available facilities and other interests. There are, among the nautical interests, quite a number of sailing enthusiasts, and a generous sprinkling of photographers and several artists. Naval architecture and naval history has quite a following. There were surprisingly few workshops listed among the available facilities, yet some of these offer assistance to members. Meteorology and mathematics were among the other interests. Now I am quite well aware that the average established society can match the foregoing. Yet I wonder if there has been a discussion between the active model-makers engaged upon " seas," the artists with their light and sky reflection, sea-bed reflection and white caps to waves, and the meteorologists with their sky and wind effects? It is this angle that makes the secretary's work so difficult in devising a syllabus of talks and discussions to please everyone—the power boat and the miniature wallah alike, not to speak of those who do no modelling. The statistics of membership can be of great help to the secretary when he prepares his syllabus. For example, I saw among the nautical interests, sea shanties and fancy rope work. Every society should let its hair down at least once a season —and what better leader than a good shantyman ?

I think most members of the Birmingham club would say that their most important milestone was the exhibition held in one of the great Birmingham stores in 1948. In my correspondence with Mr. Field (ten years before) I had mentioned the importance of an exhibition to a society and I had given details of how to organise it, having once decided what sort of an exhibition it should be. It may be an ambitious affair like the first exhibition of the Merseyside Ship Modellers in 1932, backed up, as it was, by some of the City Fathers, or one which is sponsored by the big local store that will gladly give a large corner of one of its floors for a show of models. This latter method has been carried out by many societies throughout the country. Another method is that of joining forces with the local engineers and aeroplane people, as is done in Sheffield every spring. The local public library is another focal point used by a number of societies.

Coming back to Birmingham, they advertised a model-making competition with limited cost of materials. *They doubled their membership.* Their members strained every nerve to put up a good show. The store offered valuable prizes, and they have discovered that a ship cannot sail the seas without something from Birmingham to help her on the way.

Carry on, Brum !

Display of Models at Army Camp

THE display and demonstration of models at the West Moors Army Depot of the R.A.S.C., near Ringwood, mentioned in a letter from Lt.-Col. C. E. Bowden, in our April issue, was a very successful affair.

Favoured with fine weather a remarkable number of people, both army and civilian, visited the function and took the keenest interest in the proceedings. One of the best models there was the ¼ in. scale working model by Sgt. C. A. Coleman, of m.v. *Tern* a new General Steam Navigation refrigerated ship which was seen in action in the tank and also in the exhibition Mr. J. C. Hogg, of the Poole M.Y.C., also demonstrated with his M class yacht *Sunray II*, under radio control.

The exhibition was displayed in three rooms—one for aircraft, one for yachts and ships, and the other for a railway track and other models. The main feature was the demonstration of model aircraft in which Mr. G. Honnest-Redlich, Mr. Phil Smith, Messrs. Wilmot Mansour and Co., and Messrs. Electronic Developments Ltd., took part. The Bournemouth Model Aeroplane Society and the Poole Model Yacht and Power Boat Club also gave valuable assistance.

The event was laid on by the Commanding Officer, Lt.-Col. R. A. McDonald, R.A.S.C., with the object of interesting the soldier in model making as a hobby, and bringing together the soldier and the civilian.

Some of the models after demonstrating in the tank

French Patrol Boat " Tirailleur " arriving at Portsmouth to re-fuel

Naval Photograph Club

BY P. A. VICARY

FIGURES compiled in the department of the Hydrographer of the Navy shows that in the past three years " new " wrecks were being located every five months by ships of the surveying service. The wrecks are relics of both world wars, and the names of the ships which have sunk around the British Isles are known, as well as the approximate position in which they sank. What the surveying service has been doing is an exact pin-pointing of the sunken hulls. One recent find was made by H.M.S. *Scott* close to Lunney Head near Milford Haven; this was located by diving and was identified as an unknown aircraft. H.M.S. *Franklin*, illustrated in the June issue, pinpointed two wrecks within a couple of miles of each other at a position thirteen miles east of the North Foreland and she followed this up with another five miles off Broadstairs. Another wreck was recently discovered by a surveying motor launch at the entrance to the Humber close to the shipping routes.

The newest addition to the Fleet is the Royal Fleet Auxiliary *Retainer*, which becomes the most modern Fleet replenishment ship in the service. The *Retainer* was formerly the passenger and cargo liner *Chungking* built in 1950 and owned by the China Navigation Co. Ltd. (see report SHIPS AND SHIP MODELS, May, 1954). She was bought by the Admiralty about two years ago and converted to Fleet requirements on Tyneside. At first she will be attached to the Home Fleet and later may go to the Mediterranean. Her commanding officer is Comdr. D. S. Norrington, R.N.R., formerly in command of the R.F.A. *Fort Dunvegan*. The *Retainer* is beautifully fitted out, both officers' and crew's quarters being lavish. She is fitted with derricks and an automatic lift, and is fully equipped to deal with all Fleet Supply requirements.

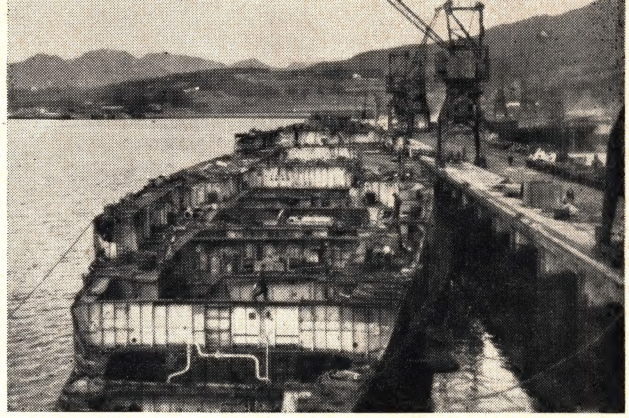
H.M.S. *Cumberland*, the trials cruiser, has undergone an extensive refit at Devonport so that new equipment to be tested can be installed. It includes the fitting of the new 3-inch fully automatic A.A. gun which she will try out in the Mediterranean this summer. The fitting of the gun has involved extensive alterations for new magazines. Items in the cruiser's programme include testing an automatic system for washing the hull of radio-active particles which may be expected from the " fall-out " after an underwater atomic explosion. This sprinkler system has now been extended to cover the whole superstructure. Trials from a remote position for controlling the boiler room and machinery will be carried out as will (in rough weather) further tests with fin-stabilisers while a 25 ft. long motor cutter built of fibre glass is also to be tested. New transmitting compasses, survival suits and an experimental distilling plant will involve other trials.

H.M.Submarine *Acheron*, which sailed from Portsmouth in April, is on a six months' cruise to the South Atlantic and Indian Ocean, visiting South Africa and Ceylon. She will return via the Red Sea and Suez Canal. The *Acheron* is to carry out a gravity survey on her cruise and will make observations designed to help increase scientific knowledge of the earth's crust. Such surveys depend essentially upon the variations in the swinging period of a pendulum. Gravity surveys of that portion of the earth's crust which is below the ocean can only be made from submarines, which, when submerged, are not subject to wave motion and therefore provide a level platform from which variation in the motion of the pendulum can be observed. In the *Acheron* is Lieutenant J. C. Harrison, R.N.V.R., a National Service officer who is also a doctor of philosophy and who, after taking his degree at Cambridge, went to the University of California. He has recently made cruises in United States submarines, in the course of which gravity surveys have been made. Three gravity surveys organised by the Department of Geodesy and Geophysics at Cambridge have previously been made in British submarines in Home and Mediterranean waters.

Another research vessel is being fitted out at Gosport. She is. the former pleasure yacht *Manihine* which is to undergo a four-year cruise in the Indian Ocean and off the Japanese seaboard. The vessel is equipped with a compact marine laboratory, a large capacity refrigerator, powerful trawl winches and echo-sound apparatus to enable her to make a detailed study of the movement of fish in the area. The *Manihine* was built in 1906 as a trawler and was converted to a steam yacht in 1938.

End of the Voyage

By IAN ROSE



H.M.S. "Renown" being broken up at Faslane, Loch Long

DEATH—even the death of a ship—is not a pretty sight. And yet near every shipbuilding centre throughout Britain is a shipbreaking or "knackers" yard, a kind of glorified marine junk shop, where, in their allotted lairs, in varying stages of decay, are the skeletons that once were proud vessels.

Ships, of course, cannot sail the seas for ever, and the main reason why they ultimately reach the shipbreaking yards is age—and high running costs. When the shipowner has decided that a vessel is an uneconomic proposition he engages a shipbroker to dispose of it. The latter invites offers from the metal recovery people—as the trade call themselves—who form a very competitive market at the present time.

It is this "metal recovery" that is the basis of all shipbreaking, hence the importance of the estimator's value on the vessel for disposal. There is, unfortunately, a misconception that vessels are taken to the knackers yard where men get busy with implements of destruction. Nothing could be further from the truth. Shipbreaking is an art. It is also dangerous, as the men will confirm.

Having been towed to the yard and duly berthed, the vessel for demolition is ready for the first process to begin, namely the removal and disposal of furniture and fittings or trimmings, as they are called. Depending on the type of ship, this may or may not involve a lot of labour. If the former is the case then it is customary to hold auctions on board the ship.

With this task completed, the dismantling of all the woodwork follows. In the days of the wooden ships when shipbreaking was an industry as yet unborn, a great deal of serviceable timber from scrapped ships was used in the construction of new vessels. Teak, available from such a source, made excellent garden furniture, much of which graced royal residences.

Sometimes the machinery aboard broken-up ships is of practical use, and high prices are paid for pieces like pumps, derricks and winches.

So far, the breaking-up process has been preliminary to the more important work of metal recovery. Just how important can be judged by the fact that many shipbreaking yards employ trained metallurgists on their staffs.

Steel, of course, is the main metal used in the construction of a ship, having a percentage of 85. Cast-iron is next with $7\frac{1}{2}$ per cent., and then such non-ferrous metals as copper, gun-metal, brass, lead, aluminium, nickel and others, in that order, which together form $2\frac{1}{2}$ per cent. The remaining 5 per cent. is wood.

The work of cutting up a vessel is done by oxy-acetylene burners and demands highly-skilled workmanship. Many pieces weigh up to 20 tons, and these are lifted ashore by crane and subsequently divided into a more convenient size—usually 5 ft. × 2 ft. × 12 in. suitable for the smelting furnaces—and, in due course, transported to the steelworks. Meanwhile, the work of separating the various metals is being carried out.

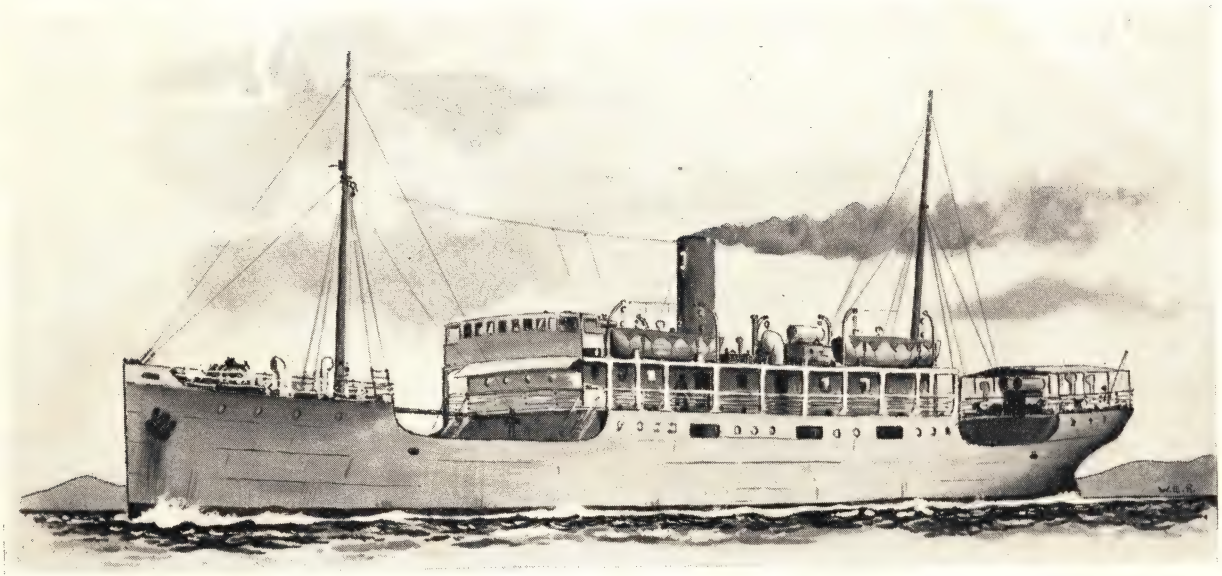
In most shipbreaking yards the work is tackled from the superstructure down, deck by deck, until only the "bones" remain. These are then beached. Formerly, divers completed the cutting up process by underwater operations, but this method proved so unsatisfactory that it was abandoned.

There is at least one yard—on the Clyde, at Port Glasgow—where ships are beached stern first, thus allowing the most important part, the stern, to be dismantled, followed by the main deck. Here, care must be taken to keep the vessel trim with the shore gradient; the lighter the ship becomes, the higher ashore she is pulled.

How long does it take to break up a ship? Well, this naturally depends on the size and type of the ship. Most breakers, however, under normal working conditions, will reduce to nothing the average cargo vessel of 5,000 tons gross and 400 ft. in length inside four weeks. To say that a ship will be "reduced to nothing" is literally true for there is no wastage in a shipbreaker's yard.

With costs in the industry at present between seventy and one hundred shillings per ton—having soared from twenty and thirty shillings per ton prior to the second world war—it is not surprising that the least expensive ships to break up are the most sought for in a wide market. These are cargo tramp steamers and tankers. The small merchantmen, cross-channel steamers and submarines are among the most costly, while the stripping work necessary on insulated ships make these the most difficult type. A recent whale-catcher yielded 1,000 tons of glass wool!

Shipbreaking is a comparative newcomer to the great shipping industry of this country and really began to establish itself in the 1930s when liquid oxygen and dissolved acetylene were developed. Since then steady progress has been maintained by reason of new ideas and improvements. It has undoubtedly proved that it serves and fulfils a need in the shipping industry.



S.S. " Liemba " in service on Lake Tanganyika

Storm Upon The Lakes

By W. E. RIGG

THE great lakes of Africa—Tanganyika, Victoria and Nyasa—are noted for their placidity, but every now and again, due to some meteorological quirk, a real snorter of a squall suddenly makes its unwanted presence felt ; sometimes tragically.

Nearly a decade ago the brand-new Nyasaland Railways motor-vessel *Vipya*, built at Glasgow by A. and J. Inglis, and in service on Lake Nyasa, was lost in a sudden violent squall. Heeling under the blast, with all her portholes and hatchways open, she rapidly filled and foundered. The loss of life was considerable.

Vipya, built in 1943, was rebuilt at Monkey Bay, on the shores of Lake Nyasa, and launched by Lady Richards, wife of the Governor of Nyasaland, in 1944. Her length was 140 ft., moulded breadth 27 ft., depth 10 ft., and draft 8 ft. Fully laden she displaced 450 tons, her cargo capacity being 100 tons. She accommodated 12 first, 4 second and 300 deck passengers. A pair of Petter diesel engines, rated at 300 b.h.p., propelled her at 12 knots.

Together with the steel motor-coaster *Mpasa*, she maintained the Lake Nyasa service until her tragic loss. She was ultimately replaced by a similar vessel, also built by A. and J. Inglis at Glasgow.

And now, as a prelude to the New Year, a sudden storm has burst upon Lake Tanganyika. To quote the Northern Rhodesian *Northern News* :

" With her Chief Engineer dead from injuries received during a severe storm on Lake Tanganyika, the East African Railways Administration steamer *Liemba* has reached Albertville in a damaged condition. The body of the Chief Engineer was landed at Albertville and buried there.

" Aircraft went out to search for the *Liemba*. She was believed to be in serious trouble after a storm on Monday night. Two barges which she was towing went adrift. Both were loaded with petrol and other cargo.

" The *Liemba* has returned to Kigoma under her own steam. The number of casualties is not yet known."

Probably unknown to the majority of ship-lovers overseas, the *Liemba* is a vessel of some historical interest. Built on the Elbe in 1912 under the name of *Goetzen*, she was engaged in the short-sea trade from German ports. But in 1914 the Germans, then in control of Tanganyika, decided she could be better employed upon the normally placid waters of Lake Tanganyika. And so she was dismantled, shipped in pieces to Dar-es-Salaam, conveyed overland to the lake and rebuilt.

Early during the first world war the British Admiralty approved a plan to place two armed motor-boats upon the lake for the purpose of capturing or destroying the existing German vessels. In December, 1915, the motor-boats sank the German *Kingani*, followed by the *Hedwig von Wissmann*

early in 1916. And with the decline of their hope for quick victory, the Germans carefully scuttled the *Goetzen* near Ujiji, some ten miles south of Kigoma, but before doing so thoroughly coated her machinery with a generous layer of tallow. They then dropped her carefully to the bottom of the lake to await the day of victory.

Goetzen lay quietly in her bed until, in 1924, she was successfully raised by a British salvage crew following an unsuccessful Belgian attempt. In spite of her eight years under water she had suffered little deterioration, with the exception of her woodwork. Her propelling machinery was in perfect condition, thanks to the Germans' generosity with the tallow ! She was reconditioned and handed over to the Railways Administration, whose main line from Dar-es-Salaam, on the Indian Ocean, terminates at Kigoma, on the lake.

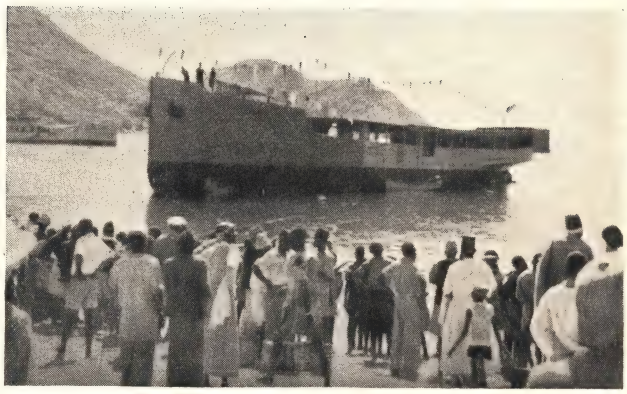
Renamed *Liemba*, flying the Red Ensign, she has maintained a regular passenger and cargo service between Kigoma and Mpulunga, Northern Rhodesia, the latter port being at the southern end of the lake. She steams approximately 700 miles on a round trip, generally towing one or two lighters.

Lake Tanganyika is 2,515 ft. above sea-level, measuring about 450 miles from north to south, with an average breadth of 40 miles and a superficial area of 12,700 square miles. Incidentally, the first Europeans to visit the lake were Burton and Speke in 1858, followed by the celebrated Dr. Livingstone in 1869.

Liemba is a well-deck vessel propelled by two sets of triple expansion engines of 250 i.h.p. Her average speed is some 9 or 10 knots. She provides accommodation for 12 first-class and 8 second-class passengers, plus 300 African deck-passengers. Her cargo capacity is 550 tons. Her dimensions are :—

Length o.a. : 240 ft.; breadth moulded : 33 ft.; loaded draft : 9 ft. 11 in.; gross tonnage : 793 ; net tonnage : 388.

Now 42 years old, *Liemba* recently underwent a major overhaul. She is apparently still capable of some years of useful service. When last seen by the writer, at Mpulunga, her hull was white, with red boot-topping. But it has also been dark grey, and black, at various times.



The ship after being raised by the British salvage crew

THE BATH FESTIVAL WEEK

IN connection with the recent Bath Festival, Rear Admiral R. J. Rodney Scott opened an exhibition commemorating the 150th anniversary of Trafalgar. In his speech Admiral Scott spoke of the Press Gang and the harsh discipline of the day; a man could be flogged for smiling, and the record for the time was 700 lashes. Men were known to have spent 6½ years without stepping on shore—otherwise they would have deserted. They had to eat their main meal in the evening so as not to see what they were eating. In fact, the only bright aspect was the burning patriotism of the day.

The exhibition was entitled " The Navy in Nelson's Day " and was well arranged and labelled. There were only a few ship models on show, but these included Mr. Pariser's brig *Procrius* of 1806 and a model of H.M.S. *Victory* made by Mr. D. Stevens of the Bristol Ship Model Club. There was a large scenic model of English harbour—Antigua, as it is today, with various lighting effects which were highly effective.

There were also shot and rigging sections and personal effects and letters.

The walls were decorated with ramrods, sponges, etc., together with a comprehensive collection of paintings, prints and plans.

Some eight or ten male figures about sixteen inches high wore the naval uniform of the time, ranging from admiral to bo'sun. These were specially commissioned from Miss Desirée E. Whitford, B.A., of Combe Martin. These figures of papier mâché were accurately dressed in suitable materials and gave a realistic impression.

'BALCLUTHA' (*Continued from page* 220)

Californians of the debt they owe to the old Cape Horners and the sailing seamen, right from the time of Drake. And, too, she will produce revenue enough to keep her going and pay for necessary maintenance, in the shape of fees paid to go aboard. No longer will she be a " show " ship filled with the junk of a dollar-grabbing showman. The *Balclutha* is being restored to her prime as a San Francisco grain trader, and her spacious tween-decks and lower hold will house exhibits worthy of the ship and the stirring days she represents.

I hope, too, that she may rest there for many years, not only as a memorial to the glorious days of Sail, but as the ship which brought the warring unions of the San Francisco waterside together, heralding the beginnings of a lasting and profitable peace.

Ship Models for the Novice

By Peter Barton

STRANGE as it may seem, a complete kit of parts for a ship model may now be bought for a nominal sum from a world-famous multiple store. Of the two which commence the series one is Sir Francis Drake's *Golden Hind* and the other is Christopher Columbus' *Santa Maria*. Old favourites indeed and only a tube of cement and a few oil colours are required to make an attractive model of the type illustrated here.

A simple galleon kit, assembled with more enthusiasm than skill, has been responsible for launching many of the keenest ship lovers and modellers on this absorbing hobby. In the past few years I am afraid my passion for sailing ships has been rather overshadowed by the business of earning a living, but when my wife brought in one of these kits to make the *Golden Hind*, I could not keep my hands off it. Her intention was to make up the model herself for the children to display in their bedroom. An excellent idea I agreed, but I was the one to make the model; I was an expert and she knew nothing of such matters! So, by promising to buy my wife the *Santa Maria* for herself, I started modelling again.

The most striking thing about these kits is that all the parts are made of plastic, The hull, masts, yards and even sails are ready moulded to shape in an opaque white plastic material that is not too brittle. One minor operation that has to be carried out first is the cleaning up of the edges of the various pieces which still retain the " flash."

No real difficulty occurs in assembling these ship models, as adequate instructions are provided, together with an excellent exploded view of the ship. Brief details of the building of the *Golden Hind* follow, and the construction of the *Santa Maria* is very similar.

The outer shell of the hull is made in two half sections, each stretching from stem to stern. Fitting between this is a complete deck section stepped up at the fo'c'sle and poop. The three pieces are cemented together and form the complete hull.

The masts are made in one piece, but the round tops are slipped on separately. The bowsprit is raked upwards at a rather steep angle and so the small plastic figurehead of the hind stands out well on the beakhead.

The spritsail for the bowsprit and the lateen sail for the mizzen mast are moulded with the yards attached. The fore-sail and fore-topsail are in one piece, being joined together where the clew of the topsail meets the yard below. The main-sail and main-topsail are similar. Transfers are supplied for the sail decorations and these go on remarkably well. The shrouds for the three masts are unusual, being printed on thin transparent plastic sheet so that when cut out and glued into position they are effective without being obtrusive. Double-sided flags are printed in colour on the paper instructions sheet, and these fold neatly round the mast heads.

The whole model is provided with a plastic base which has been moulded to represent the surface of the sea. Bow waves and wake add to the realistic impression of the ship under full sail. The model and the sea can be painted with artist's oil colours and this is the only part of the modelling that could be called difficult. The colour scheme can be taken from the sketch on the packet.

Finally, some rigging may be added but for the sake of neatness it is better to limit this to sufficient standing rigging to give stability to the masts, and only sheets and tacks for the sails to prevent their appearing uncontrolled.

Although the scale of these models is not given it is probably 1/20 in. to 1 ft. The *Golden Hind* was 60 ft. from stem to stern and the length of the model on the waterline is three inches. Accuracy and detail in some respects is surprisingly good. The hull is moulded with waling, gun-ports, channels and dead-eyes. Moulded on the sails are buntlines and reef-bands and the sails have the appearance of being laced on to their yards. There has never been sufficient information on the *Santa Maria* or the *Golden Hind* for us to be quite certain what they looked like, but these models represent more closely the accepted appearance of vessels of the 15th and 16th centuries than many I have seen.

All ship lovers and keen modellers try to infect others with their enthusiasm, and what better way than ensuring that one of these ship model kits falls into the hands of the youngster next door or nephew Johnny whose birthday it is next week? It will start them off.

In my own case the interest they aroused set me searching through all the information I had collected a few years ago for making a model of the four-masted barque *Pamir*. There were notes, sketches and photographs representing months of work, but still more is needed before I can start drawing plans that are to be accurate down to the smallest detail. I cannot put them away again, so can any reader help me continue? I have been in the doldrums too long.

The winner, Mr. B. H. Priest, with the Cup

The runner up, Mr. E. M. Butterworth, with Mrs. Priest and Mr. Bruce

"Triplane II"—note the unusual design

M.Y.A. 10-rater REGATTA

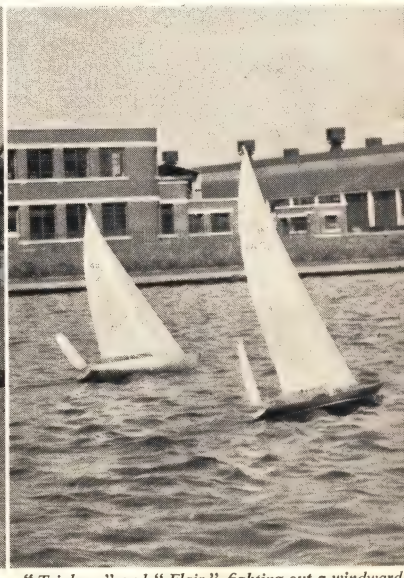
The races for the National Championship in the 10-rater class were sailed at Birkenhead on Saturday, Sunday and Monday, May 28th, 29th and 30th. Birkenhead is a very suitable venue for this event as the lake is of a good size and is not shut in unduly by buildings or trees. The weather was favourable throughout the three days and, apart from a threat of rain on Saturday afternoon, sunny conditions prevailed. There was a good whole sail breeze from the east throughout the event, which gave a beat and a run. The local club numbers amongst its members some very experienced and expert skippers and, as some good men had come from other parts of the country, the racing was of a very high order.

With an entry of seventeen boats it was decided to sail two rounds of seventeen heats each and one competitor to have a bye in each heat. As the wind held throughout the regatta these were sailed off in comfortable time. There were two entries from Ireland, one of which, *Blue Nymph* skippered by L. Paton, tied with *Flora* (E. J. Blackshaw, North Liverpool) for 4th place which it finally won.

Sailing was very consistent throughout the regatta and the leaders soon established their positions. At the close of sailing on Saturday, B. H. Priest was leading with *Tornado*, E. J. Blackshaw was 2nd with *Flora*, J. Anderton with *Flair* and E. M. Butterworth with *Judith* had equal points for 3rd place, W. H. Jones with *Iris* 4th, L. Paton with

"Suroni" just misses being fouled by "Tornado"

Mr. A. Levison wonders if "Suroni" is going to clear the bank



"Triplane" and "Flair" fighting out a windward board

"Tornado" and "Iris" make a good board to windward

Note the long L.W.L. and straightforward design of "Tornado."

"Iris"—note the nice easy lines of the hull

HELD AT BIRKENHEAD

Blue Nymph 5th, K. Jones with *Vectis* 6th, and A. Levison with *Suroni* 7th. On Sunday evening the scores were even closer, *Judith* was then leading, *Tornado*, *Iris* and *Suroni* tied for 2nd place, *Flair* 3rd, and *Flora*, *Vectis* and *Blue Nymph* tied for 4th place, with *Laureen* (D. Watts) and *Triplane II* (J. H. Snowden) 5th and 6th respectively.

On Monday the wind was slightly fluky at times and there were quiet patches on the water which caused the competitors some anxiety. During the afternoon *Judith*, which was in the lead, had a mishap which threatened to put her out of the running. The bowsie on the main boom sheet split and the jackline came adrift. However, a convenient "bye," which was due, gave her skipper time to get things fixed up and he was able to resume, which he did to such good effect that he finished the final heat, sharing the lead with *Tornado*. In the re-sails which followed the two boats fouled three times, proving how equal were the boats and also the way they were sailed. At the fourth re-sail *Judith* encountered a fluky patch and *Tornado* came in first. *Iris* was 3rd and *Blue Nymph* and *Flora* tied for 4th place, which *Blue Nymph* won in the re-sail. The final scores, above 80 points before the re-sails were as follows:—

Skipper	Club	Yacht	No.	Score	Final Pos.
B. H. Priest	Birkenhead	*Tornado*	1328	108	1
E. M. Butterworth	,,	*Judith*	1325	108	2
W. H. Jones	,,	*Iris*	781	106	3
L. Paton	Ulster	*Blue Nymph*	1407	96	4
E. J. Blackshaw	North Liverpool	*Flora*	1205	96	5
A. Levison	Guildford	*Suroni*	1224	91	6
J. S. Thomas	Bristol	*Estrellita*	979	85	7
K. Jones	Morecambe	*Vectis*	1268	85	8
H. Atkinson	Bradford	*Francis*	1338	81	9

Terylene sails are very popular

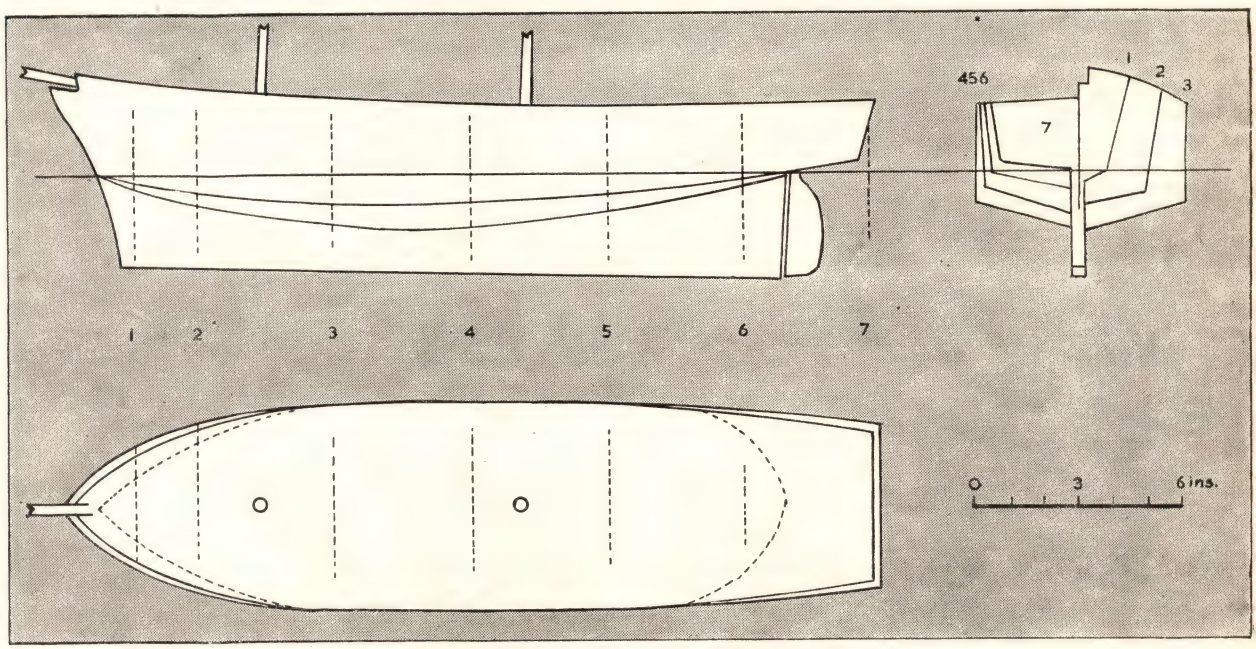
There was quite a number of very interesting boats in the regatta. *Triplane II* was perhaps the most unusual. Designed by M. Waddington on the lines of a full size "Flying Fifteen" she has a seal flipper fin, a wide transom and a rather low, broad sail plan. She is rather less beamy than her predecessor *Triplane* which has had some notable successes, and has an overall length of 65.25 in., L.W.L. of 55.45 in., beam 13 in. and a transom of 8¾ in. Her sail area is 1,018 sq. in. and her displacement 24 lb. In the 10-rater class there is a tendency to increase the L.W.L. and to reduce the overhangs. The winner *Tornado* had a waterline length of 59 in. and very long easy lines with a counter stern. *Iris*, which came in 3rd, was the veteran of the fleet, which speaks volumes for the skill with which she was handled. *Estrellita*, the Bristol boat, was designed and built by C. R. Seabrooke. Terylene is increasing in popularity as a material for sails and seems to set very nicely. On Saturday evening competitors, officials, wives and friends had a very enjoyable dinner. At the conclusion of the racing on Monday the prizes were presented to the winners and their mates by Mrs. B. H. Priest. The O.O.D. for the event was Mr. Andrew.

Developing a SAILING

THE sailing ship enthusiast who desires to build a prototype sailing model, and has not had the experience of handling one, would be well advised to start with an experimental craft. This will help him to decide on final size and rig, and in addition, to find what he has to contend with, for although "scale versus nature" is the main problem, there are others.

A simple hull, such as a sharpie, will do for the preliminary trials, built up with ply, ballasted with lead poured in direct or screwed on as a bar keel, masted with dowel rods, and rigged, on the upper yards at any rate, with paper sails on wire frames. A rough model perhaps, for public gaze, but better than an elaborate masterpiece destined to give a pathetic display at the launching, and impossible to correct afterwards.

sailing ships have a low mast height in proportion to their length in comparison with yachts. The exceptions are brigs or two-masted schooners. A brig is a good choice, having a fine lofty spread of sail and a short sturdy hull, which can be wide and deep without detriment to the general appearance.



A proposed sharpie hull for a simple sailing model of a schooner

A sailing model, at whatever scale, must be strong. It may have to withstand the shock of being rammed by a 10-rater yacht at full speed, and will certainly be buffeted by squalls which would instantly dismast the full size ship. It will be handled by helpful, but over-zealous boys who cannot be expected to examine a model with their eyes alone. Collisions with the bank are inevitable, and there are careless moves involving invisible stays and a slippery hull. A sometimes unforeseen accident occurs when a leaky ship sinks out of reach during a prolonged calm.

He who dreams of a fast clipper should make sure that he is agile enough to race it to the other side. If not he must be content with a Baltic barque or stately Indiaman. This also applies to those who would admire their ship at leisure, or take snaps.

If a tall ship is required, it will be found that most The rigging is also compact and the braces can be crossed between the masts as in actual practice. The large spanker is very useful for automatic steering.

Not so tall, but handy, is the barque, having the bulk of the square rig forward. Barquentines and brigantines are very near to schooner rig and can be sailed as such for windward work. Before choosing the rig, it would be wise to consider the prevailing winds across the local sailing water. If, for instance, the lake is lengthwise in a valley, it will almost certainly mean a "dead muzzler" one way or another for square rig, and it would be better to build a schooner of the Grand Banks type. The sight of a miniature schooner clawing off a lee shore in a gale of wind is a delight, but it is a sad thing having to take a barque from the water for want of a "slant."

Designers of the larger four- or five-masted vessels

BY C. MONEY

PROTOTYPE

must be content with slender spars and simple rigging, and the smaller craft at a larger scale are a much better proposition for those who like accurate detail. A really satisfying job would be a West Country ketch, with a rusty yet greasy windlass, tarred, weathered shrouds, and rugged masts with knots showing in the grain. A real ship between your hands.

There are model sailing men who have doubts about raised bulwarks, but a model which is stiff enough to carry plain sail in a moderate breeze makes little of a pint or two of water on deck, especially if a substantial slot scupper is provided amidships. However, for those prejudiced, there are the big training barques such as *Viking* and *L'Avenir*, with only a small well deck forward. These all-white ships with the triangular courses they sometimes set, would be quite distinctive.

A steel 3-masted barque such as the *Penang* would be a very interesting job for the metal worker, and a tinplate hull would take plenty of ballast inside the keel. Almost all the ship could be made of light metal or alloy, and would be a strong and practical job.

If your ideas favour the older types of the 17th or 18th centuries, consider giving your ship a romantic name, fly the Black Flag, and the youth of the district will be yours to a man. They will carry your ship for you, cheer it on its way across the water, and scorn the proud yachts. They will also ask how they can make one for themselves.

Whatever the choice, I would advise a colour scheme as simple as possible. After a season of sailing, a hull has many marks and scratches, and the task of repainting, for instance, a three colour hull with painted ports, must be considered, especially if you are not adept at the work. Over-scale mouldings are useful as rubbing strakes. Deck details must be capable of being scrubbed with a paint brush and soap and water. The floating refuse which collects in parts of any pond will not rinse away.

The actual sailing of prototypes is not a great problem as they are much easier to handle than yachts. The long keel helps to keep them on a course, and the large number of sails allows for a very varied adjustment of balance. The furling of a jib or royal, or the brailing of the spanker makes a surprising difference in the trim of a square-rigger. The outstanding difficulty is, of course, the square-rigger being taken aback. When this happens, the ship usually loses both head and sternway, and drifts to leeward. Sometimes, if the spanker is set to put over the helm, the ship will make sternway and regain course by box-hauling, but to do this the area of square sail must exceed that of fore-and-aft sail. A good spread of head sails is the best insurance against being taken aback, but retards windward work. Radio control, however, would provide the correction, but failing this, the problem presents interesting scope for the enthusiast who likes to experiment with automatic gadgets.

In conclusion, I would like to assure readers, that although I have made many types of ship models, from miniatures upwards, and enjoyed every minute spent on them, there is nothing to beat the pleasure of making a ship model which is actually going to sail, and seeing it shearing the lively water with every stitch of sail drawing well, and everything ship-shape alow and aloft.

VAUGHAN EVANS TROPHY

WHEN I was asked to design a plaque for the Vaughan Evans Trophy to be presented each year at the Model Engineer *Exhibition to the ship model maker who shows the most originality in subject, research and presentation, the problem seemed to be to present as many aspects of the craft as possible in a single design. The illustration here is a reduced reproduction of my drawing from which the anodised silver relief has been embossed.*

The subject does not lend itself to abstract symbolism, so it is treated representationally. Since design in ship building and ship model making comes first a drafting board is shown on the right with a bending batten and weights, ship curves, a T-square, dividers, slide rule and scale. On the left of this are note books and sketch books and photographs with reference books on the shelf above. Since the award is for exhibits covering all ship model construction, two modern and one ancient ship are shown, as the subject extends into contemporary practice and so is far greater than if only nautical archaeology were included. The rest of the space is filled with the tools of the craft, both for metal and woodworking, rolls of plans, a stack of spare timber and long strips of wood for decks and hull planking laid on a rack. With all this material crammed into a circle it was difficult

to give the design a satifactory pattern, but, due to the skill of Messrs. Denton and Downs' engraver, it looks much better in relief. *Norman A. Ough*

One of the few craft carrying a stern sail in this modern age, this felucca makes a grand sight

A scene that is slow to change. The shipyard at Ma'ala builds craft to the designs of a century ago

the camera loo

I CONSIDER myself one of those happy band of shiplovers who can recall scenes usually familiar only to those who go down to the sea in ships. Indeed, I have had an advantage over those seafarers in being able to photograph while they worked or stood by their ship. So those memories of unfamiliar scenes in strange lands and throughout the seven seas come back to life through the medium of photography.

It is well that a few of us fortunate ones have had the time, and inclination, to record those scenes that would have otherwise passed into oblivion. Here then are portrayed a few of those outstanding occasions over far horizons.

Well laden feluccas moored on the Nile's banks provide an interesting subject for a photograph

First of all a visit to the old Arab shipyard at Ma'ala near Aden. Here, away from the bustle of the modern quayside, can be seen shipwrights building dhows to the same design of a century or so ago. With the wind like a blast from a furnace, photography was not an ideal pursuit on that particular day. In a bath of perspiration I covered as much of the activity in the yard in as short a time as was possible in fear of the film becoming overheated in the camera. Fortunately the Arabs and Somalis were not obsessed with the idea that baksheesh should be paid to all and sundry as is usual in some parts of the Arab world. Neither did they attempt to obstruct my photography by raising their hands up in front of the camera as might be experienced in Egypt. Those Ma'ala shipbuilders were gentlemen before my lens.

While with the Arabs we might as well cross over to Egypt and have a look at the feluccas on the Nile. One of the few craft carrying a lateen sail today, the felucca, like the dhow, can still be seen under construction. Many hours were spent endeavouring to photograph these vessels at close quarters and one

picture in particular recalls that day when I crossed the Nile in a felucca ferry loaded with quadrupeds as well as fellahin, expressly for the purpose of cutting across the subject's bow for an unusual shot.

Leaving for a more temperate climate—and people—we enter the Bay of Naples. Whether a forest of masts and spars can be seen there today I cannot say but at one time a certain quay would always be full with Mediterranean sailing craft. So it came about that my camera got busy among them —for a short while anyway—until an *agente di polizia* almost landed me in gaol. Luck saw me clear with a trio of good pictures however, and in the one reproduced you can see the beautiful topsail schooner *Cristina* of Genoa. She was built in 1902 by E. Calamaro at Savona. First named the *Luisa Rosa* and then *Eleonara*. Astern of the *Cristina*, the barquentine *San Francisco di Paola D.* of Trapani can be seen.

It may look rough—but it will sail !

ks back . . .

By Clifford W. Hawkins

She was built by G. Benetti of Viareggio in 1914, and was originally the *Maria Luisa Tonetti.*

Sail can be seen today in many corners of the Mediterranean, particularly in Greek ports, which shelter the caique. Larnaka, Haifa, Port Said and Alexandria are all interesting places for the sail enthusiast but beware with that camera in strange ports. It can land you into very serious trouble in the eyes of foreign law.

The skeleton of a dhow in the making

" Cristina " of Genoa, a beautiful topsail schooner, first named " Luisa Rosa " then " Eleonara," was built in 1902

"*Water-Nymph*"

a new M-Class Design

by H. B. TUCKER

ALTHOUGH the M-class rating rule is also a restricted class and both contain a restriction on L.O.A., it poses an entirely different problem to the designer when compared with the 36-inch restricted class. In the latter, all major hull dimensions are limited while S.A. is unrestricted in any way. In the M-class, the only restrictions on the hull are its L.O.A. and the garboard limit, but S.A. is restricted. Unlike other rules which include S.A. measurement, the actual area of the jib is taken, and not a fore triangle measurement. Spinnakers, on the other hand, are not measured, but the length of the spinnaker boom is limited to 15 inches.

Hence, the designer must first arrange his permitted S.A. into the most efficient sail plan he can contrive, and then design a hull to carry it of not more than 50 in. L.O.A. In this connection, it is interesting to remember that early M-class yachts usually had a displacement of 16/17 lb., while today 22/23 lb. is quite normal. Actually, a few of these older, lighter boats are still doing well on some of the more sheltered, inland lakes.

One great attraction of this class is that it is big enough to put up a really good show without being too large for the average eight or ten h.p. car.

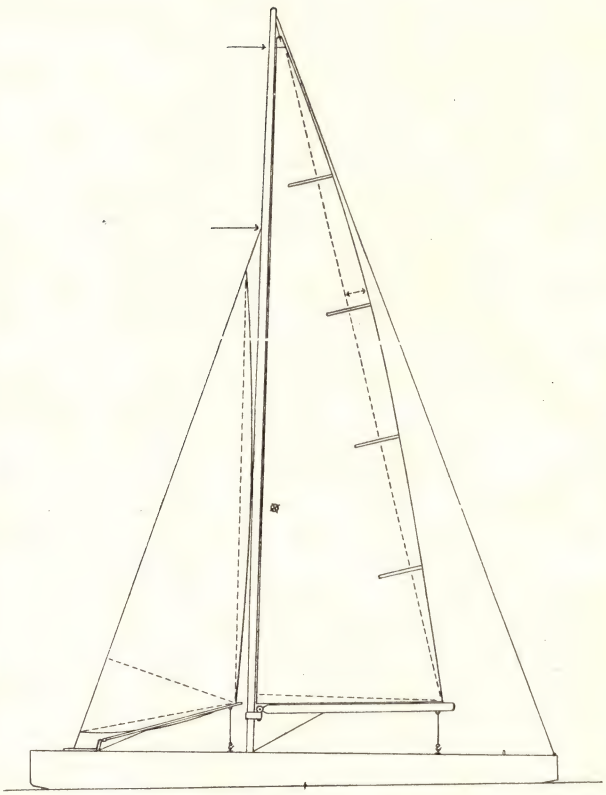
The class originated in the United States, being started by Mr. Roy Clough of the Marblehead M.Y.C., and is today the most popular class there. In this country, also, it has become our most numerous class with 403 boats registered up to the end of last year as against 311 10-raters.

Some people are fond of telling us that Britain is lagging behind the U.S.A. in model yachting. The U.S.A. registration figures up to the end of 1954 were: M-Class 110, X-Class (1,000 sq. in.) 45, V-Class (600 sq. in.) 21, A-Class 27, DX-Class (Radio Control) 10—total 213 yachts. Our own total was 1,127, over five times as many, and of these over twenty per cent. were new last year, and as far as I can make out this year's crop of new model yachts will be about the heaviest ever.

Now let us turn from general considerations to *Water-Nymph*. This design is really a large sister to my 36-in. Restricted Class design *Water-Sprite*, which appeared in the April issue of this magazine. She has the same semi-launch type of flared bow and pinched-in deckline aft. This gives a rather rakish effect which should be even more attractive in the larger boat.

I have drawn particular attention to these features as they will be far more noticeable in the actual yacht than might at first sight be apparent from the plans, especially in a small scale reproduction. On these, the extent of the bow flare is best shown by the reverse curves in the upper part of the forward buttocks, while the pinched-in after deckline is revealed by the transom in the body plan.

For the benefit of those who did not read my article on *Water-Sprite*, I should explain that this kind of bow is another method of providing reserve bouyancy forward in a boat without overhangs. It should prevent any tendency to bury her nose, when running under a press of canvas before a strong wind, and coupled with her pinched-in after deckline, should make her a very dry and seaworthy craft.

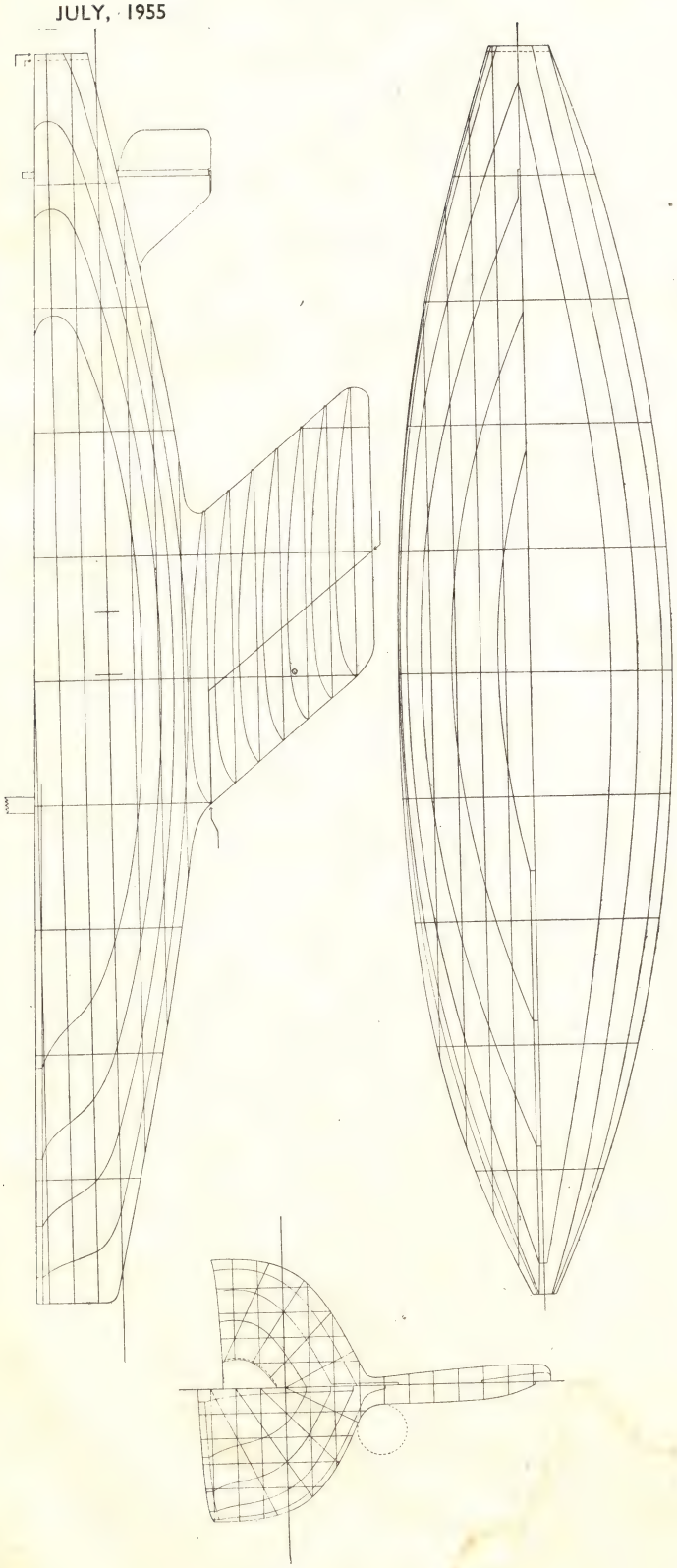


Sail plan of "Water-Nymph" (*See page 245 for table of dimensions*)

It will be noticed that, as in *Water-Sprite*, I have provided a "rubbing strake" along the sheer forward. This is not an extra wale or batten run outside the hull, but part of the topsides. If the reverse curve of the sections, which form the bow flare, was carried right up to the sheer line, it would leave a thin deck-edge liable to be damaged by even a slight collision. Accordingly, I provided for $\frac{1}{4}$ in. of vertical side above the reverse curve, which forms the "rubbing strake" under review.

This yacht is intended for vane steering, as is essential in these days for competitive sailing. Her hull is very carefully balanced, and all known sources of steering vices eliminated. The position and type of rudder used, in my opinion, give the best results in practice, because unlike the "barndoor" rudder, this does not impede the free passage of water in the leeward garboard. The fin is of the parallelogram type, wherein each waterline duplicates the one above it, and is carefully streamlined. Care has been taken also to avoid bull-headed fin-waterlines as these tend to introduce a steering vice and make the boat prone to hardheadedness.

In accordance with the best practice, the L.W.L. is a little shorter than the L.O.A., and both the turn of the stem and the bottom of the transom are lifted clear of the water. I have given my Transom Rim as an



Hull lines of "Water-Nymph." (*See page 245 for table of dimensions*)

optional fitting, but I strongly recommend its use. This consists in the prolongation of the skin of the sides and bottom slightly abaft (for this class $\frac{3}{8}$ in. suffices) the transom. This rim, projecting slightly abaft the transom, ventilates it, and almost eliminates the back pressure and drag, otherwise inevitable astern of a square-sterned boat. It also serves to cut the capilliary attraction of the skin, which adds to its effect in minimising turbulance and increasing speed.

There are several points in connection with the building of *Water-Nymph's* hull that are worth mentioning for the benefit of novice builders. Owing to her flared bow, she will not be easy to plank, so this method is not recommended except to the expert. Again, the novice might not find her easy to build by bread-and-butter method on the buttocks, but she should not present any difficulty by bread-and-butter on the waterlines. If she is being built on a former, either multi-skinned (laminated) using veneers or of fibre glass, special attention has to be given to the former to permit its easy withdrawal when the hull is complete. To facilitate matters, the former must be made in two halves that are easily separated. The forward half is withdrawn first, and the after half can then be withdrawn easily by drawing it forward. This is due to the pinched-in deckline aft.

Her sail plan is moderately high, and a very expert skipper might prefer a plan with an even higher aspect ratio, but these very high plans can be tricky to handle, as the tension of the kicking strap is rather critical. In addition, these ultra-high sails need to be very carefully made and bent.

I have called for a biggish roach high on the after leach of the mainsail. This will only be possible if terylene is used; if ordinary sail-cloth has to be employed, a smaller amount of roach would be better. The second suit is the same width on the foot as the first. The lower C.E. thus given affords greater relief than an all-round reduction of measurements, with less sacrifice of sail area. A second hanger should be provided on the foreside of mast to take the jib-stay for second and third suits.

The mast can be a duralumin tube with a wooden topmast. To ensure a taut jib-stay, runners should be used, coming from the mast at the level of the jib-stay down to the gunwales about half-way along the boom. These should have some form of quick-release fittings. The mainsail should be loose-footed, and the boom a flat section. The jib-club and spinnaker boom can be of duralumin tube. I have shown a radial jib-club of the "Guy Blogg" pattern. The boom swings on a gooseneck about 2 in. abaft the tack-hook of the jib. This gooseneck is mounted about $1\frac{1}{2}$ in. above deck on a kingpost which is stepped on the keelson, and there is a kicking strap under the boom to prevent it rising. The kingpost itself rakes aft, and it is *most important* for this to point directly at the head of the sail.

(*Continued on page* 245)

THE 'TREVESSA'

Sketch by the author of one of the lifeboats

THE *Trevessa* sank suddenly during the night, fifteen hundred miles from the nearest land. Superb seamanship by her captain and chief officer saved the majority of her crew. Their lifeboat voyages are epics, comparable with Bligh's terrible journey in the *Bounty's* launch.

Displacing 5,004 tons the *Trevessa* was built at Flensburg, Germany, in 1909, and eleven years later, in 1920, the Hain Steamship Company bought her.

She sailed from Fremantle on May 25th, 1923, loaded with zinc concentrates destined for Antwerp via Durban. The first few days broke fair. Then, on June 1st, the *Trevessa* pitched into the short, steep seas of the Indian Ocean. Captain Foster cut down her speed. But she still rolled heavily, straining her steel fabric and cracking her shell plating.

At midnight on June 3rd an able seaman reported water for'ard. A party led by the captain went to investigate. She was not lifting to the sea. In the gloomy cavern of No. 1 hold the little group heard water slapping ominously against the bulkhead.

The pumps were useless, her cargo had set like cement, preventing the water from draining to the bilges. The sea poured in through gaping cracks in her hull. Soon the *Trevessa* was lying dead in the dark, gale-whipped water.

Captain Foster realised she was doomed. He sent out an SOS, but received no reply. Her position was lat. 28.45 S. and long. 85.42 E.—right in the middle of the Indian Ocean.

The provisions in her two starboard lifeboats were hurriedly checked. At 2.15 a.m., her foredeck awash, he ordered "Abandon Ship." The two boats, No. 1 and 3, were lowered with difficulty in the black night; the wind howled at 50 m.p.h., a heavy sea was running with waves forty feet high.

They fended off. Oars grabbed frantically at the sea as the boats pulled away. At five minutes to three the *Trevessa* stood on her bows. Watched by the huddled men in the boats she suddenly plunged to her death.

It was less than three hours after the first warning had been given!

Cast adrift in a small boat was no new experience to Captain Foster. He had been torpedoed twice during the Great War and his experience gained in that hard school proved invaluable.

The situation looked desperate. There were twenty men in his boat (No. 1) and twenty-four in the chief officer's (No. 3). The crew was a mixed one—British, Arabs, Burmese, Africans and Indians. The two boats shared 125 pounds of biscuits, 130 tins of condensed milk, 5,000 cigarettes and ten pounds of tobacco. They each had fourteen gallons of water.

Foster decided to make for Mauritius—1,728 miles distant. They rode out the storm on a sea anchor, then got under way.

Captain Foster banked on a rain-laden westerly wind to supplement their meagre water supplies. There was no chronometer to assist in ascertaining longitude and the violent motion of the boats made the spirit compasses useless, thus the captain and the chief officer had to steer by the sun and stars.

Empty cigarette tins served as measures. Each man received one third of a tin of water each day at two o'clock. One lid of condensed milk, equal to four teaspoonfuls, was doled out twice a day; once at 8 a.m. with biscuit and again at 4 p.m. without.

Those biscuits were as dry as powder. The men couldn't masticate them. Foster tried mashing them with a little condensed milk, but the mixture couldn't be swallowed. The water issue at 2 p.m. soon became the one bright spot in their struggle for survival.

No. 1 boat was faster than its companion. As no reply to the SOS had been received they decided to separate; this would double their chance of

STORY

A thrilling account by REX GUTRIDGE of a ship's crew adrift for over three weeks

rescue. The boats passed out of sight of each other on June 9th, their sixth day adrift.

Unbeknown to the survivors, a sister ship, the *Tregenna*, had picked up the SOS. She began searching the area and on one occasion she passed within ninety miles of No. 3 boat's track. But she zig-zagged further to the south and never saw them.

The men in No. 1 boat grew weak from hunger and thirst. Their rations were barely able to sustain life. The heavy sea made a mockery of any attempt at sleep, but Captain Foster drove the little craft grimly on. Rolling and plunging it lurched towards Mauritius.

On their sixteenth day under canvas, Ali and Nagi, two Arabian firemen, fell ill. Foster increased their rations slightly, hoping to pull them through. But both succumbed to the privations of the voyage, and they were buried at sea.

The seventeenth and eighteenth days brought heavy weather. By nightfall on the nineteenth day the battered crew were at their last gasp. The incessant baling had exhausted them.

Then it began to rain ! But their clothing and the sail were encrusted with salt. Water caught in this crude manner proved undrinkable. Tins were held under bedraggled faces to catch the precious trickles; in this way they eked out their slender supplies.

Foster made sail again on the twentieth day. The boat was being driven north. He might easily miss the island of Rodriguez for which he'd set a course a few days previously. He coaxed the little boat southwards, close to the wind.

The twenty-second day found them cold, covered in salt-water boils and thoroughly depressed. The first man to sight land was offered a reward—an extra tin of water !

On the twenty-third day the carpenter raised a shout. The coast of Rodriguez loomed out of a sea-mist, fifteen miles away.

Foster sailed south in the gathering darkness. He was unwilling to attempt a landing due to his unfamiliarity with the terrain. Then they saw a light. It came from the house of the superintendent of the Eastern Telegraph Company.

An hour later a fisherman came alongside and piloted them in. The men were so weak they had to be lifted from the boat.

No. 3 was still engaged in her battle with the sea. She'd suffered heavy casualties : one man had been lost overboard, seven of her crew had died of exposure.

They sighted Mauritius on the twenty-fifth day. Shortly before dawn they hailed a fishing boat. The fisherman stared goggled-eyed at them—he thought they were spectres and sheered off. But one of his less superstitious companions came up a few minutes later and took them in.

No. 1 boat had sailed 1,556 miles in twenty-three days. No. 3 boat had travelled 1,747 miles in twenty-five days. Those rations had been husbanded with care. Between them, the boats had enough left for a further six days at sea !

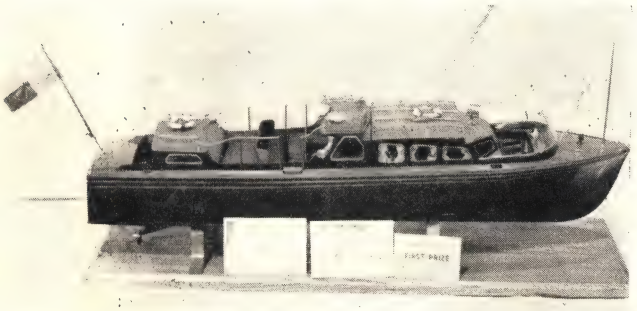
The author's impression of S.S. Trevessa

JASON WRITES ON . . .

Sheffield S.M.S.'s Annual Exhibition

THE Sheffield Ship Model Society held its eleventh annual exhibition in the Leopold Street Technical Schools, Sheffield, recently. As usual it joined forces with other local societies in hobbies and crafts.

The exhibition was opened by the Master Cutler, Mr. W. G. Ibberson. He took great interest in the display of ship models and remarked on the fact that



Mr. W. Wilkins' model of the Royal Barge, winner of the Ship's Bell for the best model of the year and of the Power Boat Cup

our ships usually commence in Sheffield and district.

The society is in a flourishing state and some of the models exhibited a craftsmanship second to none. During the past few years the power-boat section has developed enormously under the chairmanship of Mr. Leslie Leach—and for the first time in a northern exhibition, a 400-gallon tank was installed for demonstration purposes. The clean-looking, beautifully rigged clipper ship *Caliph*, a working model, disported herself on the tank, using one-fan-power wind, in an effective demonstration.

There were nearly sixty exhibits by the society for the eight main awards in ship modelling. The Ship's Bell for the best model of the year went to Mr. W. Wilkins for his *Royal Barge*, a radio-controlled 36-in. power boat with a splendid exhibition finish. This entry also won the Power Boat Cup and a special trade prize. The Originality Trophy was secured by a schoolboy, Master Thorneloe, for his free-lance design 27-in. cabin cruiser.

The Workmanship Cup is always an important award for it usually indicates future champions. This year it was awarded to Flight-Lieutenant Ferry for his still incomplete model of a 40 gun frigate (*circa* 1790). Minor items of finish still require attention, but on the whole this model shows exceedingly good work. Among other unfinished models was the steamer *Maimoa* by Mr. D. Anthes, who will be remembered for his fine model tanker *Beaconstreet*. The work on *Maimoa*, however, is even better than *Beaconstreet*.

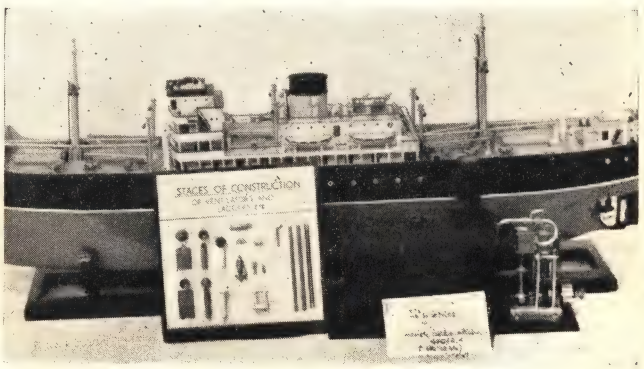
After many years Mr. Drury, whose speciality is miniature work, entered for—and won—the Miniature Trophy with his H.M.S. *Gay Bombardier*. Enhanced by an especially effective "sea setting," this now-famous "little ship" was seen bouncing along in a slight swell.

One of the most coveted awards of the society is that which is offered for the first effort by a new member. This year the competition was really fierce and was confined almost exclusively to the power-boat section. The New Member's award went to Mr. Jack Lee for his power boat *Royal Barge*. Mr. Lee won his award because of his "finish"—though generally speaking, finishing was very poor in this section. It cannot be said that the making of the power unit diverted time and effort. Many of the entries had no "innards" at all.

Strangely enough, a good finish was noticed on a kit-of-parts model. In a society which has amongst its members such modellers as Anthes, Robinson, Maltby, Wilkins and Ferry to mention only a few, this room-for-improvement in finish will, in due course, be tackled and surmounted. The Accuracy Cup was won by Mr. Cordingly with his topsail schooner and a special Junior Prize was won by Master Taylor who made effective use of extra details and finish on his kit model of a cabin cruiser.

Messrs. Hobbies Ltd. offered three special prizes which were won by Mr. Allsopp for his 22½ in. *Ark Royal*; Mr. Wilkins for his *Royal Barge* and Mr. Robinson for his *Caliph*.

A fine model of a cargo liner by Mr. M. Cutler in the Loan Section



MERCHANT SHIPS, WORLD BUILT, 1955 VOLUME

Compiled by the publishers with an introduction by A. C. Hardy, B.Sc., M.I.N.A. Published by Adlard Coles Ltd., Southampton. 25s. net.

This is Volume 3 of this valuable series, and whereas the previous volumes dealt only with British-built ships the scope has now been extended to cover the new ships built throughout the world, thus increasing enormously its value as a book of reference. This volume deals with the ships of 1,000 tons gross and over built during 1954. In his introduction Mr. Hardy discusses the continuing tendency to build tankers and also their increasing size. These have usually been built with their machinery placed aft, and this feature is now being tried out in some of the new passenger ships, the most notable example being the new Shaw Savill liner *Southern Cross*, which was completed early this year and, thus, too late for inclusion in the volume under review. Mr. Hardy makes some interesting comments on the greater attention now being paid to the external appearance of the ship, the streamlining of the superstructure, the changes in funnel shapes and masts. The photographs throughout the book illustrate these points very clearly. In fact the photographs and drawings are a very important feature of the book. The drawings, which show nearly twenty ships of various types and of all sizes, include the new Cunarder *Arcadia* and the Italian liner *Cristoforo Colombo*. The profile and the various decks and deckhouses are shown in each case, making them of the greatest value to the ship model-maker. The alphabetical table of the vessels completed during the year gives the principal dimensions, tonnage, machinery, builder, owner's name and flag, and will be very useful for quick reference. Another table gives the ship owners of the world in alphabetical order, with names of their new ships. Incidentally, the reference to the addendum should read page 244 not 224. This is a book which the ship lover will browse through with the greatest interest, and for the ship model maker the illustrations will provide unlimited inspiration for future models.

THE SHEET ANCHOR, VOLUME 3, NO. 1

The Journal of the Wembley Ship Model Society.

This issue of the "Sheet Anchor" is as full as ever of useful, practical articles on ship modelling and kindred subjects. Following the editorial we have an article with drawings on the epoch-making *Turbinia*, designed and built by Sir Charles Parsons in 1894 to demonstrate the possibilities of the steam turbine as a power unit for marine propulsion. This is by Captain L. S. McCready of the U.S.A. and is followed by further particulars from the Editor. Another American contribution is that of two excellent drawings of the British motor trawler *Hildina* from Model Shipways, Bogota, New Jersey. Here again the Editor has provided useful particulars of the ship. Mr. G. H. Draper concludes the interesting series of articles on his 100 ft. to 1 in. scale model of the old *Mauretania*, and Jason continues with his notes on sea settings for scenic models. Norman Ough writes on his "Drawings of Warships," with particular reference to the cruiser *Curacoa*, accompanied by a reproduction of a drawing of the ship originally published in this magazine.

Other articles include one on jigs by J. B. Jenkinson of Greenwich, notes on his model of an old English hoy by L. A. Stock, and the description of a Universal gas torch by A. R. Turpin. Book reviews, including a review of "Nelson's Ships," club notices, correspondence and the Ditty Box, complete what is an excellent issue of this very useful magazine. A final word—by arrangement with the Guild of Model Shipwrights—a copy of the recent transactions of the Guild is being bound in with every copy of the magazine.

THE A.B.C. OF BRITISH COASTAL SHIPS

By H. M. Le Fleming. Published by Ian Allan Ltd., Craven House, Hampton Court. 2s. 6d. net.

The list of Ian Allan books on ships is growing steadily and now includes books on ocean freighters, ocean tankers, yachts, Solent steamers and even canal boats. The latest is an attractive little book on coastal ships. This definition includes ships engaged on coastal, cross-chanel and short sea routes around and between Great Britain and Ireland, and to Northern Europe from Norway to Brest. Passenger and dry cargo vessels, tankers and the larger ferries are included. These ships are often seen in our ports, and at this time of the year when so many of us are on the coast, a small handy book such as this would prove especially interesting for reference. These small ships of are special interest to the ship model maker as they are such excellent prototypes for working models. The book covers its subjects very effectively, and the illustrations are both numerous and clear. With its eighty pages, 6 in. by 4 in., and its moderate price, it is a very good investment.

next month

The August issue of SHIPS AND SHIP MODELS *will contain in addition to the usual features . . .*

THE COASTAL TANKER "SHELL WELDER"

Laurence Dunn has made one of his cut-away drawings of this ship which is one of a group of ten now being built. Being of less than 600 tons gross and of unusual design it makes an ideal prototype for a working model.

A HOSPITAL SHIP FOR THE NORTH ATLANTIC

Alan Villiers tells the story of the new hospital ship which the Portuguese Government has just built for the welfare of the fishermen of the Grand Banks and of the Newfoundland coast.

LOSS OF THE NORTHFLEET

J. Mannering re-tells the tragic story of the loss of this emigrant sailing ship which was sunk in collision off Dungeness with heavy loss of life.

GLASS FIBRE FOR MODEL SHIP HULLS

J. C. Chapman supplies more information on this increasingly popular method of making model hulls.

You will not want to miss this issue so we advise you to . . . .

PLACE YOUR ORDER TODAY

No. 19: The SAXON and

BY LAURENCE DUNN

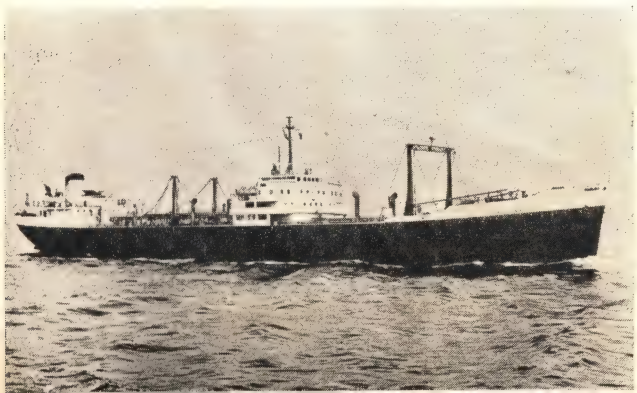
DISCUSSING the large size of his tankers at a recent launch, Mr. Stavros Niarchos stressed the point that the aim has not been bigness for its own sake, but rather improved operating efficiency, cheaper running costs and quicker turnaround. Certainly in his fleet of Saxon and World tankers he has what is probably the most outstanding independent tanker fleet in existence, and one which includes vessels remarkable not only for their size, but also for speed and cargo handling equipment. This post-war fleet is made up of eight 14-knot Saxon ships of approximately 20,000 tons (d.w.) apiece and a number of tankers bearing World names, one of which is of 28,000 tons d.w., eleven of 31/38,000 tons d.w. as well as one giant of 45,000 tons d.w. All these World ships have speeds of 16 knots or over and are on long term time charter to the big oil companies.

One of the most remarkable features of this fleet is its youth, for it was only in 1949 that the first of these ships—the *World Peace*—was completed. Taking the smallest—the Saxon ships—first, we find that they are of three main types, comprising four sisters built in the U.K., two in Holland and two in Sweden.

They are the:—

Saxondale	**Built**	**1952**	**13,321**	**tons**	**gross**
Saxonglade	,,	1952	13,322	,,	,,
Saxonglen	,,	1953	13,321	,,	,,
Saxonmead	,,	1953	13,321	,,	,,
Saxonheath	,,	1952	12,705	,,	,,
Saxonhill	,,	1952	12,705	,,	,,
Saxonsea	,,	1953	12,843	,,	,,
Saxonsky	,,	1953	12,843	,,	,,

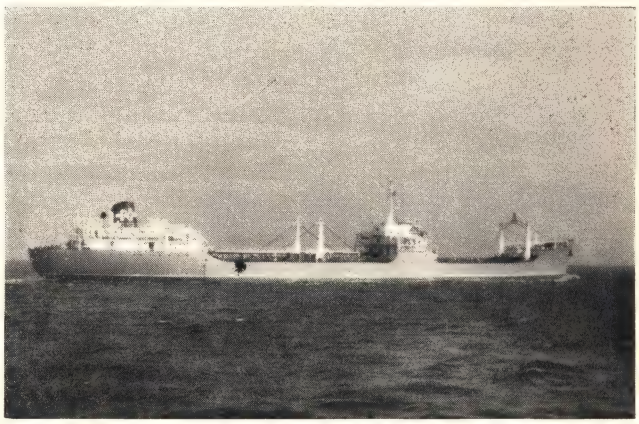
S.S. "Saxonheath" seen in Shell colours. Note open base to bridge



The first four which are owned by the Imperial Shipping Investment Co. Ltd., of Hamilton, Bermuda, fly the British flag. Handsome craft of 14/14½ knots, they were all built by Vickers-Armstrongs Ltd. at their Tyneside yard but were fitted with machinery made at the firm's Barrow establishment. Each measures 556 ft. in length o.a., has a mld. breadth of 75.1 ft. and 27 cargo tanks. Their hulls are of three island type. A tapered, dome-topped funnel and sharply tapered kingposts give a very smart and attractive appearance. A small but distinctive item is the shape of the cross-bracing between the forward kingposts, which rises upwards towards the centre-line, a feature repeated in the large *World Harmony*, *World Enterprise* and *World Glory*.

The next two ships *Saxonheath* and *Saxonhill* were built in Holland, a fact more easily remembered if one notes the formation of their names, the third syllable of which begins with the letter H, in contrast to the Swedish-built pair which use the letter S. Products of the Netherlands Dock & Shipbuilding Co., Amsterdam, they measure 560 ft. in length o.a. and 73.2 ft. in mld. breadth. Neither they nor the *Saxonsea* or *Saxonsky* are quite as pleasing to the eye as the British-built quartette. This last pair was built by Kockums M.V., Malmo, has an overall length of 556 ft. and a yet narrower breadth of 72.2 ft. mld., although the depth as in the other six is 40 ft. This variation in beam has a slight effect on the d.w. tonnage which for the British-built ships is 20,450 tons.

S.S. "Saxonmead." Note thick rooted mast and kingpost

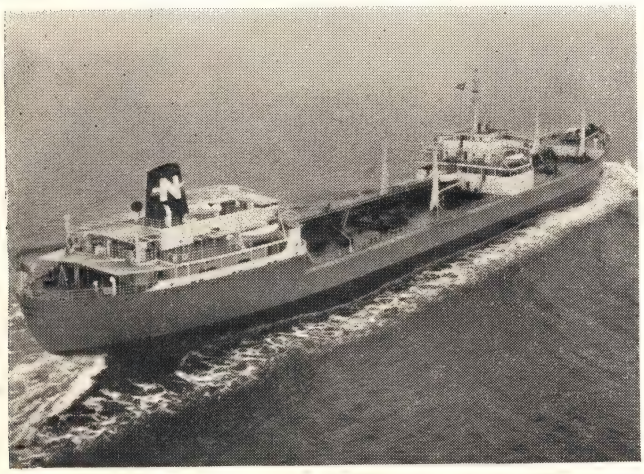


The figures for the Dutch/Swedish-built vessels are 20,100 and 20,200 respectively. These, however, have a slight advantage in speed and the *Saxonsky* in trial attained 16.1 knots. In common with the World tankers all are powered by D.R. geared turbines and water-tube boilers. The Kockums-built pair have several distinctive features by which they may be identified, notably the thick bases to the kingposts and mast and the vertical base to the bridge house, where the conventional hances have been dispensed with. Finally,

there is the shape of the hull itself, which at the junction of deck and sides is rounded, after the fashion of the old-time turtle back deck. Here there is a very heavy fore-and-aft member which in section has a 90 deg. curve. Made of Coltuff steel, it is 1½ in. thick and adds materially to the longitudinal strength. These last four ships are owned by another of the Niarchos group of companies, the Oriental Tanker Corporation S.A., of Panama.

S.S. " World Concord." Note low forward gangway and long hances at base of bridge

WORLD tankers



The Swedish-built " Saxonsky," showing curved edges to well decks and vertical base to bridge

THE WORLD TANKERS

The fleet of World tankers started with what were once considered exceptionally large vessels, but which are now the " babies " of the series. These two are the:—

World Peace	... ...	**Built 1949**	**18,092 tons gross**
World Liberty	... ...	**,, 1949**	**17,738 ,, ,,**

Both were built by the Bethlehem Steel Co., at Sparrows Point and Quincy, respectively, and measure 551 and 624 ft. in overall length and 68 and 84 ft. in breadth mld. The difference in beam/length ratio has considerable effect on the d.w. tonnage, the respective figures being 18,072 and 28,352. The *World Peace* which came into the news not long ago by hitting a bridge over the Suez Canal differs from most in having a stump mast instead of the forward kingposts. Here, too, we see the fore and aft gangway over the forward well is very low. This feature is repeated in later craft, while in those contemplated there is the possibility that the " catwalk," the traditional distinguishing feature of the oil tanker, will be replaced by an internal fore-and-aft passage which will also take the pipelines. Maintenance costs will thus be reduced though the ships will not lose cargo space, for while carrying crude oil, they seldom have all their tanks in use. When new these ships attracted much attention by their high speed 16.18 and 17.4 knots, respectively (7,000 and 12,500 s.h.p.). The *World Liberty* was also given turbine machinery of very advanced design, taking steam at 600 lb. pressure and 850 deg. F.

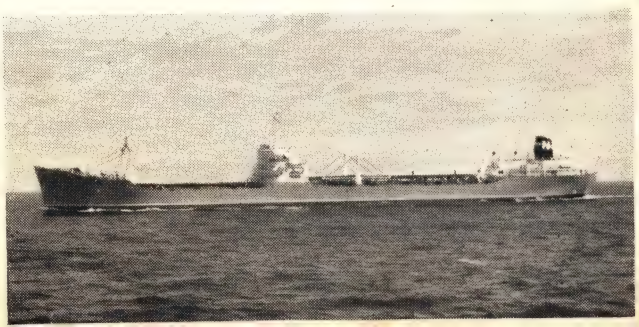
Next followed four larger ships by Vickers-Armstrongs Ltd. which comprised two pairs of sisters, each design in turn holding the record of being the world's largest:—

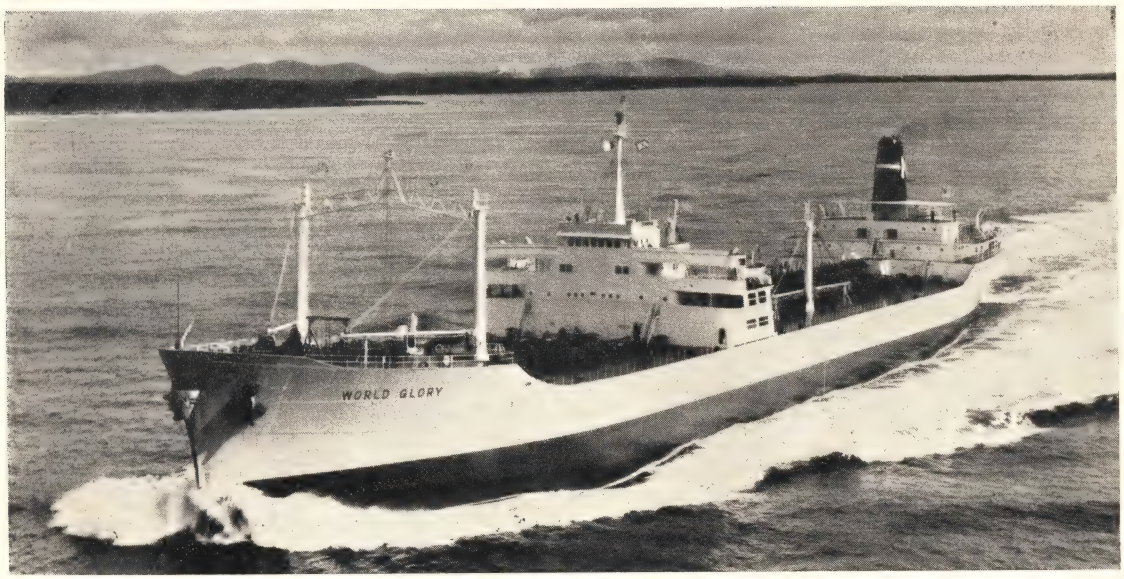
World Concord	... ...	**Built 1952**	**20,125 tons gross**
World Unity	... ...	**,, 1953**	**20,131 ,, ,,**
World Enterprise	... ...	**,, 1953**	**20,536 ,, ,,**
World Harmony	... ...	**,, 1954**	**20,991 ,, ,,**

All four are owned by the World Tankers Corporation of Monrovia, and cost about £1½ million apiece. The last of the quartette, the *World Harmony*, which was christened by the Duchess of Kent, differs from the rest of the fleet in being registered in Greece, whose largest merchant ship she is. It will be recalled that in November last the *World Concord* broke in two during a gale off the Welsh coast. The ship, which is now being joined together at Antwerp, was in ballast at the time, and it has been suggested that imperfect ballasting may have been a contributory cause. It should be remembered, however, that the specification for the building of ships is largely based on accumulated empirical knowledge, the result of many years of trial and error rather than on calculation. The building of large tankers is so new a feature that the designer has had to largely rely on calculation. It now appears obvious that the stresses to which they are subjected are much greater than was first realised, with the result that several hundred have been given extra stiffening, and building rules amended.

The first two vessels of this group—the Barrow-built ones—are 653 ft. in length overall and 86 ft. in breadth mld., but the later pair, built on the Tyne are 10 ft. longer although the beam remains the same. This results in a slight increase in d.w. capacity from 31,800

S.S. " World Harmony." Note the " A " shaped cross bracing between forward kingposts





S.S. " World Glory," largest of the Niarchos tankers, on trial

to 33,000. All four carry their cargo in 30 tanks and are fitted with pumps capable of handling 2,550 tons of water per hour. In appearance they generally resemble the Vickers-Armstrongs-built Saxon ships. The two pairs of larger ships have several external differences by which they may be distinguished. The first pair have only straight cross bracing between the forward kingposts, but the later ones have the A shaped bracing previously mentioned. Their bridge shape is also of more advanced and attractive design and is one deck higher in order to obtain better visibility over the bows.

There are six other tankers of approximately the same size, these being the:—

World Gratitude	**Built**	**1954**	**20,035**	**tons gross**
World Grace	,,	**1954**	**20,431**	,, ,,
World Guardian	,,	**1955**	**20,430**	,, ,,
World Guidance	,,	**1955**	**20,000 (approx.)**	,, ,,
World Jury	,,	**1954**	**20,355**	,, ,,
World Justice	,,	**1954**	**20,355**	,, ,,

The first four belong to the International Transport Corporation of Monrovia, and are products of the Howaldtswerke yard at Kiel. The last two (J for Japanese construction) were built by the Mitsubishi S.B. & E. Co. of Nagasaki for the Intermarine Navigation Corporation, also of Monrovia. All six are 660 ft. in length o.a., but while the German-built vessels have a beam mld. of 86 ft. 5 in. the last two measure 88 ft., the respective d.w. capacities being 32,500 and 33,000 tons. The bridge shape in the German-built vessels shows much advance over earlier ships, a new feature being the slight curve at the top. Other distinguishing features are the lower placing of the anchor and the single crosspiece between the first set of kingposts. In contrast, the Japanese-built ships rather resemble the Swedish-built *Saxonsea* and *Saxonsky* especially as regards bridge shape, this structure again having a vertical base without hances. Each of these six ships has 30 tanks and a loaded trial speed of about 17.5 knots. Their pumping equipment is even more elaborate. The capacity on the two J-class ships is 3,000 tons per hour while for the others the figure is 4,000 tons.

The two remaining vessels are much larger and are named:—

World Grandeur	**Built**	**1955**	**—**	**tons gross**
World Glory	,,	**1954**	**27,812**	,, ,,

The former, which was launched last March by Howaldtswerke, has a carrying capacity of 38,500 tons and measures 700 ft. o.a. × 97.5 ft. mld. The first of three of a new type building at two different yards, she has 33 cargo tanks and a pumping installation capable of 5,000 tons per hour. Like the rest of the more modern ships she uses high pressure steam—600 lb. pressure and 850 deg. F.

The *World Glory* was built by the Bethlehem Steel Company for the World Tankers Corporation Inc., and has a d.w. capacity of 45,509 tons, a figure which once made her the world's largest tanker. Since her completion she has, however, been eclipsed—though by a small margin—by several other super tankers. She is 736 ft. long overall and has a mld. beam of 102 ft. Her cargo, carried in 33 tanks, is handled by pumps capable of 4,000 tons per hour. A notable feature of her design is the patent hull form and stern lines which gave a loaded trial speed of 17.44 knots at the remarkably low power of 13,900 s.h.p.

Of the other vessels on order the two most important are a pair, each of 47,000 tons d.w. now building by Vickers-Armstrongs Ltd. at Barrow. Due for launching in the very near future, they will be the largest in the fleet, with dimensions 757 ft. (o.a.) × 97 ft. mld. They are designed for a loaded trial speed of 17 knots and a normal s.h.p. of 18,000. Although these tankers of the Niarchos group are owned by various subsidiary companies, all are managed by the Imperial Shipping Investment Co. Ltd., of Bermuda. Their housefunnel is black with a large white N superimposed on three bands which, reading downwards, are painted red, white and blue.

SHIP MODELLING AT SEA

By James M. Robson

DURING a long spell of shore leave in 1952 I decided to build a model of the Clyde paddle steamer *Waverley*, which is distinctive as being the only post-war Clyde steamer, apart from some ill-designed screw propelled diesel ferries. It would also represent my first attempt at model building.

As no plans were available, I made several trips on the ship, took a large number of photographs and commenced to draft ½ size scale plans. Soon after, I started building the hull, using 28 gauge brass, after drawing out the hull lines as I would imagine them to be. After a few months the result was an utter failure, due, no doubt, to lack of experience. However, I succeeded in making the bridge and aft shelter lounge, using 1/32 in. ply.

Late in December of that year I joined the s.s. *Dallas City* as radio officer, and after the season's festivities were over, I obtained the use of the wartime radio cabin which was the aft cabin on the starboard side of the midship accommodation. The door opened out on to the open deck and thus it was very exposed. At the time this did not worry me as I looked up Mr. Westbury's excellent drawings of a paddle wheel, in MODEL SHIPS AND POWER BOATS. These drawings were scaled down slightly, modified as required, and the cutting out of the frames commenced, using duralumin of approximately 16 gauge.

Before long, however, there were a few quizzical countenances around the door of the cabin. " What's that you're making, Sparks ? " " Oh, I'm making a pair of feathering wheels." Incredulous and puzzled glances would follow, so to avoid misguided speculations on the vessel's new radio officer, I explained more fully. As was to be expected, the engineers were interested and proffered their services immediately. Without their aid things would have been much more difficult. After the frames were finished, I obtained five feet of ½ in. brass rod from the second engineer and gave the fourth engineer drawings so that he could turn out 16 tie rods for the paddle frames and, later, two brass hubs.

By this time I knew we were to expect bad weather and, in fact, it was wellnigh impossible to work on the ship's lathe owing to the increasing roll of the ship. During the night the weather got much worse, and by next morning a howling gale was in progress. I made my way along to the workshop, waited for an opportune moment between seas crashing inboard, and entered. An open patent ventilator and a leaky port had admitted a considerable amount of Atlantic vehemence and my tools, bolts and nuts and an overturned chair were all lying in three or four inches of water ! I managed to gather up the lot by standing on the chair, and then, when salvage was completed, a hasty retreat was made to my cabin on the lower bridge.

Work was not resumed until near Panama. At this juncture I discovered I was lacking 10-B.A. nuts and bolts so the ship's radio transmitter was started up and a telegram sent, requesting more. When we arrived in Honolulu, for bunkers, these necessary items were received. Meanwhile, the fourth engineer and I had completed the plans. So with avidity I set to work again, but it was not until we were nearing Australia from Yokohama, that the paddle wheels were completed and feathering nicely. A large piece of perspex acquired on a visit to a Queensland radio station provided material for four pairs of Welwin-type davits which were completed along with four balsa lifeboats and two brass foil funnels which the third engineer wanted to do on the return trip.

On leave once more I again attempted construction of the hull, slowly and unsteadily, toying with the idea of taking it with me next trip. Finally, I made up my mind to do so. I joined the m.v. *Fresno City* and, with some 28 gauge brass, again took up work. The radio room/workshop was located as before.

Unfortunately, a trough of low pressure accompanied us to the U.S. and back; many 1/32 in. drills were broken—and little was accomplished. On the return journey the ship rolled and yawed continuously with a heavy following sea, and, after a huge wave had entered the starboard alleyway flooding the storeroom, saloon and nearly drowning the chief steward, I deemed it advisable to remove the hull, tools, etc., once again to the safety of my

cabin. The partially-made hull was discovered in a foundered condition with miniature waves lapping over it, so the wreckage was removed and stowed under my settee. The main radio room was also in rather a shambles and watchkeeping was difficult. But, finally, we arrived home.

After we finished discharging, we again proceeded across the Atlantic for the U.S. and Japan—but with somewhat better weather so the workshop was again commissioned, and it soon reverberated to the sound of riveting and general industry. Christmas, 1953, and New Year were spent in the Pacific, and toasts were drunk to the success of the p.s. *Waverley* among other things. But by the time we were near the Japanese coast, it was clear all was not well. From midships to bow of the model there existed an irremediable twist! With sullen resignation I announced to all that I had failed miserably and was packing up. The crew was shocked. I was entreated to begin again otherwise I would be discredited, but I was adamant and retreated to the main radio cabin and listened to some chamber music.

However, in the morning the chief called me into his cabin and asked me what was wrong, I told him, and he told me where I had gone wrong. Frustration gave way to reflection, and after leaving port, a hatchboard was procured, planed flat, and a keep was cut of $\frac{1}{8}$ in. $\times$ $\frac{1}{2}$ in. steel. It was also necessary to insert this hatchboard diagonally into the workshop as the hull was to be 62 in. $\times$ $7\frac{7}{8}$ in. $\times$ $4\frac{7}{8}$ in. and the cabin was only 5 ft. $\times$ 5 ft. The model required a complete new bow and midships section, so with the keep positioned and lying flat on the hatchboard, the plates were cut, centre lined and laid on accurately, the chief engineer supplying this time 28 gauge tinplate.

The method of construction was as follows: approximately ten plates were used, lap-jointed with double staggered riveting, using 1/32 in. rivets and soft soldered inside. These plates went up to just past the level of the ports. Four butt strips joined these plates to the deck level, and were carried right round so that no lap joints would be visible where the four sections of saloon windows were. Five bulkheads were used, three ribs amidships and one each aft and forward. This method proved very satisfactory. The numerous windows were cut out after the sheer lines had been accurately determined, and the framing was done by stretching 1/32 in. ply behind the windows and drawing a facsimile. A $\frac{1}{16}$ in. border was drawn and the openings cut out. The small top sections in each window were glued in and the lot varnished, the chief officer this time supplying the varnish. Tinted celluloid was bolted at the back and the framing aligned on the windows from inside the hull.

The sponsons were cut from $\frac{1}{4}$ in. ply (later replaced with obeche for lightness), and sponson housing was made from the tinplate and affixed to the ply with hard aluminium angles. It was decided to use ball races for the paddle shaft to run on, so

Close-up photograph of the writer's model of P.S. " Waverley " built entirely at sea

the necessary holes were cut out and the shaft aligned. On arrival at Sydney, operations were suspended as we loaded grain for home. After we left, the hull was cleared of grain dust that had settled, work was intensified, the motor was aligned with the gearbox, $\frac{1}{4}$ in. obeche strip bolted round the top of the hull for the 1/10 in. ply deck and, finally, 12 sparred seats were made while on watch. On arrival the hull was crated and sent home.

Another four months were spent in completing the project while indisposed. Owing to lack of time, a commercial four-channel reed unit was used in conjunction with a six-star clockwork escapement (modified from a four-star one) and an electrical six position paxolin platform was built under it with a trailer arm on one of the star arms. This was simple and works extremely well, giving the following speeds on Channel 1:—

Stop+slow ahead+half ahead+full ahead+half ahead +slow ahead. Channels 2 and 3 are rudder, port and starboard, using a motor operating a worm and moving a bush over a threaded rod. Channel 4 gives instantaneous $\frac{1}{2}$ astern by means of a reversing relay.

The stability of the model is excellent due to low positioning of the Bassett-Lowke Supermarine motor and four "gel" cells lying flat on the bottom of the boat. The upperworks are also very light and the draft is only $1\frac{7}{8}$ in. The wash produced by the paddles looks very realistic and hardly any water is lifted by the curved plywood floats.

I have since seen authentic plans and was surprised and delighted to find that I am very close to the original. Thus, the story ends with the conventional happy ending.

TOPICAL DIGEST

Paddle Tugs for the Navy

The Admiralty have placed orders for seven diesel electric paddle tugs for use in dockyards. The last paddle tug to be built for naval service was the "Pert," completed in 1916, but a number of older craft are still in service, including the "Volatile" at Portsmouth and the "Cracker" at Sheerness, which were both completed in 1899.

Experience has shown that paddle tugs are more efficient than screw-driven tugs for work in confined basins because of their great manoeuvrability and power. This is particularly important in the docking of aircraft-carriers, which, because of their size, tend to be caught by gusts of wind when not under their own power, and may drift dangerously.

The new tugs will have a length of 145 ft. between perpendiculars and a beam of 58 ft. across the paddle sponsons. The first two, the "Director" and the "Dexterous" will be laid down at Scotstoun soon.

Studied 3,000 Blueprints for Model

The man who supervised the building of the model of H.M.S. "Magpie" for her former commander, the Duke of Edinburgh, and who installed it at the Duke's request in the sitting room in the Royal yacht "Britannia," has just finished another masterpiece.

The scale model of the world's first "flash tight" gun turret, now in the Imperial War Museum, took Arthur Trollope nearly four years to complete.

Making it involved studying more than 3,000 Admiralty blueprints, many of them top secret.

Although he is so highly skilled at the work, model-making was only a hobby for 63-year-old Mr. Trollope until he retired after 35 years with Lloyd's. But his skill was recognised when he was made a regular judge at the "Model Engineer" Exhibition.

"WATER-NYMPH"—*Continued from page 235*

This exact rake prevents the kicking strap tightening as the boom swings out. If the strap tightens as the boom swings out, the boom will stick up, particularly in light weather.

A radial boom increases vastly the efficiency of the jib, because the flow of the sail varies with the sail trim. A dead flat sail is given close-hauled, but increasing flow is permitted as the sheet is eased off. The ordinary model yacht pattern jib-boom gives a dead flat sail on all points of sailing. The kicking strap under the "Guy Blogg" pattern boom does not affect the horizontal flow in the sail, but keeps its after leach in control, and thereby obviates twist in the head of the jib. This radial boom can be used with first and second suits, and an ordinary model yacht pattern boom with the third suit.

Water-Nymph has plenty of power and should be a good sail-carrier, while her section should permit an easy first heel in light weather. She should point very high and go where she looks. Off-wind, she should also give a good account of herself. She should plane well in a good wind because of her long, easy buttock lines.

Dimensions:

L.O.A.	50.25 ins.
L.W.L.	47.5 "
Max. Beam	10.625 "
Draught	10.75 "
Displacement	22.5 lb.
Sail Area	792 s.q ins.

Table of Weights

	lb.	oz.
Hull, incl. Deadwood	3	12
Deck, incl. Beams and Hatch	1	0
Paint and Varnish	1	0
Rig. incl. Spinnaker and Boom	1	4
Steering Gear		6
Fittings		4
Trimming Ballast		6
Lead Keel	14	8
Total	22	8

Sails (dimensions in inches)

	Luff	*Leach*	*Foot*
1st Suit			
Mainsail	60.0	61.5	17.0
Jib	45.0	39.875	14.375
2nd Suit			
Mainsail	54.0	55.75	17.0
Jib	41.0	35.5	14.375
3rd Suit			
Mainsail	48.6	50.125	15.3
Jib	36.9	32.0	12.9
Spinnaker	47.5	47.5	32.0

Boom, 15.0 long.

Fun and Games with Radio Control

By C. F. COMPTON

CONTINUING the description of the application of the Vibrator power pack (see Fig. 4 on p. 207 in the June issue) the pulse contact was a piece of silver soldered on the tip of the armature, with a similar piece on the end of a 10-B.A. screw mounted on a bracket over it. The 10-B.A. screw is adjusted with an eye on the receiver pulse signal as shown on the usual ammeter and an ear on the buzzer to retain a healthy note. As long as the locknut on the contact screw is secured very few readjustments are needed over quite a long period.

The relay used is 25 ohm resistance with the armature mounted on a leaf spring as shown in the sketch. The freely pivoted armature type can be used quite successfully. It will have a lower natural frequency but this does not matter—in fact I believe

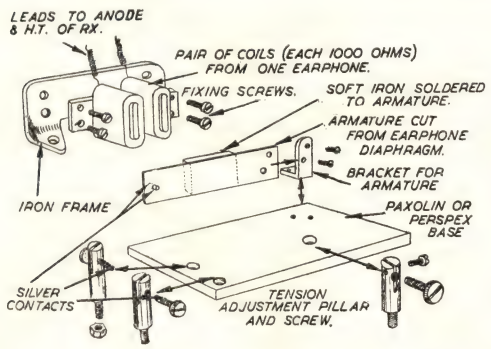

LEADS TO ANODE & H.T. OF RX.
PAIR OF COILS (EACH 1000 OHMS) FROM ONE EARPHONE.
FIXING SCREWS.
SOFT IRON SOLDERED TO ARMATURE.
ARMATURE CUT FROM EARPHONE DIAPHRAGM.
BRACKET FOR ARMATURE
IRON FRAME
PAXOLIN OR PERSPEX BASE
SILVER CONTACTS
TENSION ADJUSTMENT PILLAR AND SCREW.

Fig. 5. Relay made from headphones

the 150 c/s to be a bit high for some anode relays. On 4.5 V the consumption is 45 ma. and the best results are obtained when using 3 V at 28 ma. The 25 ohm variable is full in on a new battery and after a season's full use is still three-quarters in.

The piece of silver for the transmitter contacts came from one of three links of a silver watch chain, kindly donated to the cause by the local jeweller. Each link was cut and gently hammered into a length of straight wire of about 16 gauge, the end filed flat and the whole piece soldered to the end of the screw or wherever needed. Then the end was cut off with about $\frac{1}{16}$ in. left on the screw. The end was squared and the other piece put safely away for the next time. (Note this and the silver are used again in the home-made anode relay later on.)

The buzzer pulse generator is this time mounted in an aluminium (ex Oxo) box fitted to the side of the evergreen Cossor transmitter. It plugs in as the clock-operated generator did (and, indeed, still does for some purposes). However, yours truly bows his head when he says plug in, as he well remembers wasting his first attempt at the Poole Radio Day because he forgot to!

Three years ago the rule was "always pull out the old and plug in the new." But we still pull out the new and plug in the old—it often works better!

The two main relays were installed one on the top of the other in the relay box in the hull to simplify wiring and leave room for other items which, at that time, were still in the air. The rudder limit switches on the rudder head as before, with plug and socket connection to the relay box. Now it cuts the operating relay, saving battery (especially if out of range or radio failure for long periods) instead of just cutting the motor supply.

RECEIVER (Anode) RELAYS

To operate the two main relays, the receiver relay must have a back contact—that is, the moving blade (armature) makes a contact when it is at rest and when held in by the current in the circuit. Thus one main relay is operated when no signal is received and the other when a mark is received. The receiver still in use in *Conrad* is the old faithful Cossor, and this had only a "make" contact when the receiver current dropped on receipt of a signal. So out came the piece of silver and another contact was added. Unfortunately, in order not to disturb the whole layout of the relay this was simply stuck on as an obvious extra. And when the buzzer pulse generator got to work the increased mass of the initially large armature was definitely unhappy, and the carefully made settings and adjustments didn't stand up to it.

This could have been overcome by redesigning the entire relay to improve compactness, but about this time I received my copy of Bulletin No. 5 from the International Radio Control Models Society and Mr. C. H. Lindsey's article provided the answer: an anode relay can be made from discarded radio headphones. The details provided were, unfortunately not easily adapted as my search through my many headsets produced none similar to Mr. Lindsey's. A new layout as shown in Fig. 5 was sketched out, but I would like to record my thanks to Mr. Lindsey for his original work.

I was under the impression that the position of coils in relation to armature anchorages, tension screw and contacts was going to be critical, but it has not proved so. My first attempt produced an excellent result, and the second—although no actual measurements were made—just put together. It looked right and it works well.

The two coils are removed from the magnets inside

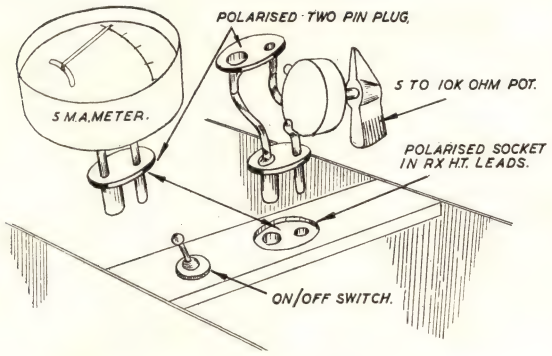


Fig. 6. Meter socket and additional variable resistance for H.T. current control

the earphone and handled very carefully to avoid breaking the connecting wire between them. This is important. I have a pair here anyone can have if they like to join the two coils together! These two coils are then mounted on a simple bracket cut from a scrap of soft iron (iron to complete the magnetic circuit) and the tags soldered to two eyelets on the same piece of paxolin or perspex upon which the whole relay is to be built. The armature is of thin spring steel and its thickness and width will determine how sensitive the relay will be. I have tried all kinds, and on the first one used a strip cut from the earphone diaphragm. Being thin and relatively soft it is ideal for currents (anode) about 0.5 to 4.0 ma.; above this, such as being used as secondary relay to carry more current, steel about razor-blade thickness would do fine.

To the armature is soldered a block of steel just big enough to cover the coil pole faces. This is located after the spring anchorage is fitted to get it placed just right.

The anchorage is bent up from any available material and one end of the armature fitted to it. To the other end of the armature another tiny piece of the silver watch-chain link is riveted. The tension screw is fitted to one of three brass pillars salvaged from a small old alarm clock. If one has access to a lathe these can be produced quite easily or perhaps a friendly jeweller would produce some. The other two pillars, each with a silver tipped contact screw, are arranged one on each side of the armature when the latter is in place.

I had thought of giving a machine drawing of the relay, but the chances of your headphone parts being identical to mine are rather remote, and you will enjoy designing your own for your own purpose anyway. When installed on the base of the Cossor receiver I found the contact screws out of reach with a screwdriver, so have now fitted some knurled nuts as shown in Fig. 5 and have no trouble with the most sensitive adjustment on the bench or on the pond side.

The total resistance of the two coils is 2,000 ohms, and after the 4,500 ohms of the original Cossor I found the standing current of the receiver had gone up from 3.0 to 3.6 ma. This has proved a real asset as the receiver now has a variable resistance put in circuit and, with the relay set at about 2.5 ma., I can use my H.T. from its start at 69 V down to about 45 and it takes ages to do that!

Testing for sensitivity gave me lots of fun, and I find a simple bench rig is worth while to get the feel of and accurate readings from it. The first thing I noticed was the lack of snap in the armature. This I have since proved is partly due to a rather wide gap between back and front contacts at the time of testing, but is due more to the soft nature of armature.

With a gap of $\frac{1}{16}$ in. between the contacts a steady increase in current through the relay caused the armature to *move slowly* from one contact to another, with a current variation of about 0.25 ma. It could be held in between the contacts "floating" without any difficulty. This, of course, could be a menace on a straightforward circuit using sequence control of the on/off variety. But with a pulse circuit the armature will buzz happily between contacts and only pass a very small current as referred to in the section before pulse generators, where a low leak of current through the main relays was aimed at.

To assist in adjusting the relay on the bench or at the pond-side (the photo in the December, 1952, issue of MODEL SHIPS AND POWER BOATS shows it being done at the Poole regatta!), I have a 5,000 ohm variable resistor fitted with plug and socket so that it can be inserted between the receiver and milliammeter as shown in Fig. 6. The receiver standing current can be sent up or down over about three milliamps and the exact place where the relay cuts in or out can be noted and exact adjustments made. In use I note the standing current is usually 2.5 ma. Tune receiver to maximum dip when signal is sent 1.6 ma. Then operate buzzer and, if necessary, adjust buzzer to make ammeter read 2.2 ma. (this allows for slight drop with range). Using the plugged-in variable resistance I ensure that the relay cuts out when the current is being raised at 2.0 and in on the other side at 2.4 ma. With my relay well set it then cuts out going down at 2.3 and in again at 2.0 or 1.95 ma. But do not imagine that it is as easy as that. I often spend one or two hours solid twiddling to get those results and hope not more than one adjustment ever gets out at one time. . . .

The receiver had by this time been in and out of its box so often that I decided to go the "whole hog" on plugs and sockets. A new receiver can now be fitted in a few moments without soldering, as all my projects, boat, bus and yacht, have identical plug and socket installations. The battery and aerial leads all-in-one plugs will cause wonder. It did to me, but so far no fault can possibly be attributed to it.

(To be concluded)

OUR COVER PICTURE

This month's picture shows a general view of the Wellington Dock, Dover. The photograph was supplied by Mr. Jack Scheerboom.

Ships and Ship Models Mailboat

● **Letters of general interest on maritime matters are welcomed. A nom-de-plume may be used if desired, but the name and address of the sender must accompany the letter. The Editor does not accept responsibility for the views expressed by correspondents**

JOHNSTON WARREN SHIPS

In the current issue I note a very interesting article by Laurence Dunn of the ships on the Johnston Warren Line. Reference is particularly made to m.v. *Oakmore* (ex *Levante*), and emphasis is put on the fact that she has a maierform bow.

I made a voyage in this ship last year and enclose a photograph, taken alongside the quay at Antwerp, which brings out the lines of the bow. Perhaps you may find this of sufficient interest for publication.

Reference is also made in the article that a sister ship of the m.v. *Oakmore* was m.v. *Cairo*, and it may interest your readers to know that that vessel during the war became the German raider *Stier* and was sunk during an epic fight with the American liberty ship *Stephen Hopkins*.

Birmingham, 28. R. C. STALLARD.

A "CORY" COLLIER MODEL

Herewith is a photograph of my latest model which, I feel, may be of interest.

The model is a $\frac{3}{16}$-in. scale steam-driven working model of one of William Cory and Sons, colliers. She is the *Corbridge* of 1,707 tons gross. (A description of ships of this line appeared in the March, 1954, issue of SHIPS AND SHIP MODELS.)

The model was made possible by the kind co-operation of the Cory Line, who lent me plans of this vessel.

She is 50 in. overall, with beam of 7 in. The hull was built bread and butter fashion, from 1-in. obechi planks. The superstructure, bulwarks and deck are made from $\frac{1}{16}$-in. resin-bonded ply.

The superstructure (bridge and boat-deck) lifts off to reveal the Bassett-Lowke twin-drum boiler. Access to the Eclipse engine, and methylated spirit burner, is gained by removing the hatch covers. Enough air reaches the burner through the open fiddley gratings to ensure proper combustion.

The fittings include steam cargo winches and anchor windlass, cable stoppers, bollards, bells, spare Bower and Stream anchors, hawse reels, sanitary tanks, various lockers, navigation lights with plastic lens, stove pipes and Tilbury lights.

The decks are planked and lined where applicable, steel decks are painted. Wheel house and bridge dodger are planked with mahogany.

The finish is with semi-mat dope. The bare wood was filled with several coats of dope mixed with french chalk to the consistency of cream, and rubbed down with wet or dry paper used wet. When the surface was as smooth as porcelain, four coats of dope were applied, rubbing down with fine grade, wet or dry. The final coats were thinned as much as 50 per cent. Although many people are against dope finishes for ship models, I have found that I get on with it best, although I have tried most other finishes in the past.

The displacement is to scale, and about 10 lb. of lead ballast is carried inside the hull.

The Eclipse engine of $\frac{7}{16}$ in. bore and stroke, a single cylinder slide valve engine, made by Bassett-Lowke, provides more than enough power for the modest eight knots of the prototype.

With the steam valve open wide she will forge through the water at a speed more akin to a destroyer than an old tramp!

Torquay. D. W. GREENSLADE.

THE ROGERS COLLECTION

Further to the review of the Rogers Collection Catalogue in the May issue of SHIPS AND SHIP MODELS, may I draw attention to the final paragraph in this excellently-illustrated book which states, without apology: "There are no drawings, blueprints, or photographs available from the Naval Academy Museum for sale or distribution of any of the models listed in this catalogue."

From the viewpoint of the marine archaeologist and ship modeller this is a most regrettable statement as, apart from the fact that nearly all other museums have, at least, photographs available of the historical models in their care most of the earlier and more valuable 17th century models in the Rogers Collection are now rapidly deteriorating.

I have two first-hand reports, made just over a year ago by an American shipmodelling friend, of visits to the Annapolis Museum, and one or two articles from

(*Continued on page* 250)

news from the clubs....

MODEL YACHTING ASSOCIATION

This year's "A" Class regatta which is to commence on Sunday, August 7th, at Fleetwood includes, for the first time for six years, the international competition for the "Yachting Monthly Cup," which has been returned to the M.Y.A. by the United States of America. The Wing & Wing Cup for for the fastest run-down wind has also been returned and it will be awarded this year. It is not, however, proposed to stage an open water race this year.

Briefly, the programme of the regatta is that the British Open "A" Class Championship, which is open to overseas competitors, will continue until the following Friday evening or Saturday morning; a first round for the M.Y. Cup will then be sailed on the Saturday afternoon with the finals on Sunday, August 14th.

The British boat to challenge for the Y.M. Cup will be nominated by the regatta committee after the completion of the British Championship.

Hon. Secretary: VICTOR F. WADE, 87, Stonyhill Avenue, South Shore, Blackpool.

MODEL POWER BOAT ASSOCIATION

The following are the regattas for July:

Date	Venue	Start
3rd	Wicksteed at Wicksteed Park, Kettering	11.30
3rd	Bromley at Whitehall Recreation Ground, Bromley	11.00
10th	Wallasey at Central Park, Wallasey	11.30
10th	M.P.B.A. Radio Control Regatta at Victoria Park, Hackney, E.9	11.00
17th	Southend at Southchurch Park, Southend	11.00
24th	Radio Control Regatta Mortlake, Elettra Trophy at the Lagoon, Hove	11.00
24th	Bedford at Longholme Lake, Bedford (provisional)	11.00
30th	St. Albans at Verulamium, St. Albans	2.00
31st	M.P.B.A. National Speed Regatta, Verulamium, St. Albans	12.30

In addition to the radio control regattas on the 10th and 24th, there will be radio control events at Bromley on the 3rd and St. Albans on the 30th.

The Grand Regatta will be held at Victoria Park on August 28th, the day following the closing of the "M.E." Exhibition.

Hon. Secretary: J. H. BENSON, "Holford," 25, St. Johns Road, Sidcup, Kent.

INTERNATIONAL RADIO-CONTROLLED MODELS' SOCIETY

The annual international contest for radio-controlled models will be held this year in the North of England, the contest for boats and yachts on Saturday, July 30th, and aircraft on Sunday, July 31st. The boats' contest will take place at Saltwell Park, Gateshead-on-Tyne, and that for aircraft at Croft Aerodrome, nr. Darlington. The latter will be held in conjunction with the S.M.A.E. Northern Gala.

Entry forms and all particulars available from the Hon. Publicity Secretary: D. ALDRIDGE, 1, Fowberry Crescent, Fenham, Newcastle upon Tyne, 4.

GUILD OF MODEL SHIPWRIGHTS

The meeting of the guild held at the studio-workshop of Mr. Norman Ough was well attended. A paper from Mr. F. A. A. Pariser of Birmingham, a corresponding member, on "The Preparation of Timber for Built-up Ship Models," read by the secretary, dealt principally with Mr. Pariser's methods of machining the timber into accurate strips for forming frames and planking—thus saving a lot of tedious handwork. A lively discussion followed. Copies of the first issue of the "Transactions of the Guild of Model Shipwrights," prepared by Mr. and Mrs. W. O. B. Majer, were distributed among members.

Hon. Secretary: LAURENCE A. PRITCHARD, M.I.N.A., 24, Gordon Avenue, Southampton. Tel.: Southampton 54412.

WORLD SHIP SOCIETY, BELFAST BRANCH

The final meeting of the branch's 1954/55 season was held on May 17th, in the Overseas League, Ulster H Q., Belfast. The chairman and secretary were re-elected for the coming season, following which, plans for the future running of the branch were discussed. The first meeting of the 1955-56 season will be held in October.

Hon. Secretary: B. L. DEVENISH-MEARES, 30, Wandsworth Road, Belfast.

NORFOLK NAUTICAL RESEARCH SOCIETY

The arrangements for July are as follows:—

On Tuesday, July 5th, at 7.30 p.m., there will be a visit to the dockyard of Messrs. Fellows & Co. Ltd., Southtown Road, Great Yarmouth, conducted by Mr. J. M. Fellows.

Hon. Secretary: JOHN F. C. MILLS, Opie House, Castle Meadow, Norwich. Tel.: Norwich 23241.

Y.M. 6-m O.A. & SOUTH LONDON M.Y.C.

The following are the events for July:—

Date	Class	Event	Start
Sun. 3rd	M	Team Race, *v.* Poole M.Y.C.	10.30
,, 10th	A	Glenham Cup (open)	10.30
,, 17th	A	Handicap Race	2.00
,, 24th	M	Team Race, *v.* Hove & Brighton M.Y.C.	10.30

Sailing water: Rick Pond, Home Park, Hampton Court.

Hon. Secretary: N. D. HATFIELD, 132, Westborne Grove, Westcliff-on-Sea, Essex. Tel.: Southend-on-Sea 46925.

HOVE AND BRIGHTON MODEL YACHT CLUB

The fixtures for July are as follows:—

Date	Class	Event
Sun. 3rd	10-r/36-in.	Guildford M.Y.C. at Hove
,, 10th	10-r	Metropolitan and Southern District Championship at Hove
,, 17th	M	Hastings M.Y.C. at Hove
Sat. 16th / Sun. 17th	36-in.	36 in. R National Championship at Poole
,, 24th	M	Club Match, *v.* Y.M. 6-m O.A. at the Rick Pond, Home Park, Hampton Court
,, 31st	M	Third Club Championship

Sailing water: The Lagoon, Kingsway, Hove.

Hon. Secretary: F. JENNINGS, Ardingly College, Haywards Heath, Sussex.

POOLE MODEL YACHT AND POWER BOAT CLUB

The following are the fixtures for July:—

Sat. 2nd Juniors
Sun. 3rd Club Day. M Class at Rick Pond
Sat. 9th Power
Sun. 10th Miller Shield—M Class
Sat. 16th / Sun. 17th National Championships—36-in. Class
Sat. 23rd Juniors
Sun. 24th Juniors. 10 Raters
Sat. 30th Power
Sun. 31st Power M Class

Hon. Secretary: W. E. L. PERRETT, 46, Cranbrook Road, Parkstone, Dorset. Tel.: Parkstone 3420.

WALLASEY MODEL POWER BOAT AND YACHT CLUB

Mr. H. V. Young has recently taken over the duties of secretary in place of Mr. R. L. L. Don, who has resigned. The club's annual open regatta will be held at Central Park, Wallasey, on Sunday, July 10th, at 11.00 a.m. Events will include steering, nomination and hydroplane competitions. Visitors will be welcomed.

Hon. Secretary: H. V. YOUNG, 9, Eastcroft Road, Wallasey, Cheshire.

HAMMERSMITH SHIP MODEL SOCIETY

The July meetings will be held at 7.30 p.m. at "Westcott Lodge," Lower Mall, W.6.

Tuesday, 5th "Jigs and Tools"—A talk by J. B. Jenkinson.
,, 19th Club Auction Night.

Hon. Secretary: H. J. COSTER, 98, Craven Park, Harlesden, N.W.10.

WORLD SHIP SOCIETY, LONDON AND HOME COUNTIES BRANCH

On May 21st, a party of members of this society and their friends visited the Union Castle intermediate liner *Bloemfontein Castle*. On Saturday morning, July 16th, a visit to the Port Line m.v. *Port Sydney* has been arranged. The next branch meeting will be held at the "Two Brewers," Shoe Lane, Fleet Street, E.C.4, on Wednesday, July 6th.

Hon. Secretary: A. L. SARGEANT, 142, Sutherland Avenue, London, W.9 (Tel.: Cun 4196), who will be pleased to supply information about the Society.

WEMBLEY SHIP MODEL SOCIETY

No meetings of this society are taking place during the two holiday months of July and August. Members, however, are making arrangements to hold an exhibition on September 3rd, in Wembley Town Hall, details of which we hope to announce shortly.

Hon. Secretary: EWART C. FREESTON, 41, Daryngton Drive, Greenford, Middlesex.

The editor invites correspondence and original contributions on all subjects connected with ships and ship models, which should be addressed to him at 19-20, Noel Street, London, W.1. Matter intended for publication should be clearly written, and should always bear the sender's name and address.

All correspondence relating to sales of the paper should be addressed to THE SALES MANAGER and correspondence relating to display advertisements to THE ADVERTISEMENT MANAGER.

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American magazines which leave no doubt as to the grave effect on the models of woodworm, the humid Annapolis summer and lack of air conditioning at this museum.

Whilst it must be admitted that this sad state of affairs is primarily our own fault for letting the models go out of England, where climate and conditions are more favourable for their preservation, more should be done by the American authorities concerned in looking after these apparently unappreciated works of art and in having available photographs suitable for study and modelling purposes.

It would, I suppose, be asking too much that the lives of some of the more important models be taken off and distributed, as our own maritime museums are so lacking in enterprise in this respect.

One cannot help drawing a most unfavourable comparison with the Musée de la Marine in Paris, where excellent photos and beautifully-drawn and detailed plans are actually sold at reasonable prices.

I am sure many readers would be most interested to see in these columns any comment the Rogers Collection Curator might care to make.

Barton-on-Sea. DONALD MCNARRY.

QUESTIONS ANSWERED

In the January, 1955, issue, J. C. Streeter asks for information on the ships in the film "World in his Arms." The schooner with the bowsprit was the former Gloucester schooner *Leonora Silveria*, built at Essex in 1912 (in Mass., U.S.A.). She was wrecked in 1921 on Cape Cod, but was eventually refloated. Captain Ben Pine purchased her and changed her name to *Pilgrim*. She was again wrecked in 1934 on Cape Breton. The Canadians salvaged her, and she went back to sea as the *Shirley C.* In 1951 she was given back her full rig for the "World in his Arms." A few months after the film work was completed, the schooner, bound for Newfoundland with a load of coal, was lost off St. Pierre. This time she was a total loss.

The knock-about schooner used in the film was a Newfoundlander, and the movie shots of the race were filmed out of Newfoundland (the race in the film was in the North Pacific) and the pictures were some of the best water stuff ever turned out by a film studio.

The barque in the photograph is the *Seute Deern*, and is a far cry from the *Gorch Foch*. She was built in the U.S.A. in 1919 as the four-masted schooner *Elisabeth* ; in 1924 she was the Finnish *Bandi*. In 1938 she was re-rigged as a barque under the German flag. She is now the *Pieter Albert Koerts*, a Dutch youth hotel at Delfzyl.

In the December, 1954, issue, Joseph F. Kostalik asks where he can track down the lines of the sloop *Wasp*. Firstly, the U.S. Government Printing Office in 1945 published an excellent little book (and very inexpensive) called "Register of Officer Personnel, United States Navy and Marine Corps and Ship's Data 1801-1807" with plans of all ships in the Navy of that period, including the *Wasp*. And Howard Chapolle in his book "History of the American Sailing Navy" has full information and plans on the *Wasp*; the latter is very detailed. (For a review of this book see MODEL SHIPS AND POWER BOATS, August, 1950.)

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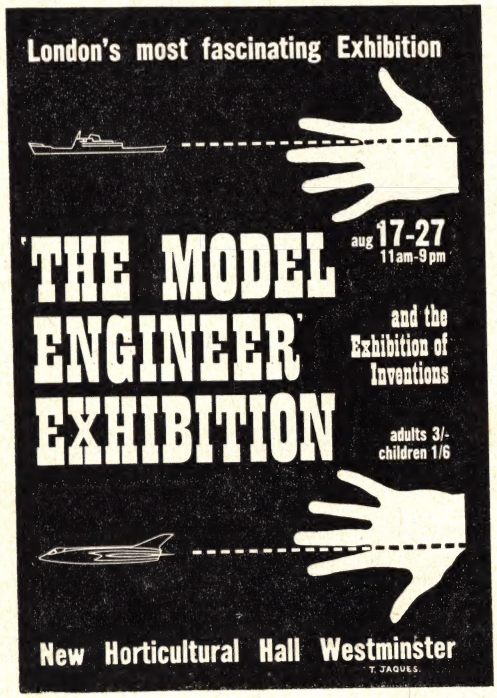

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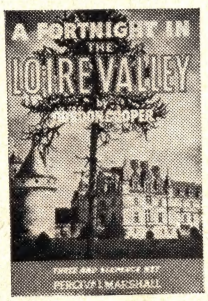

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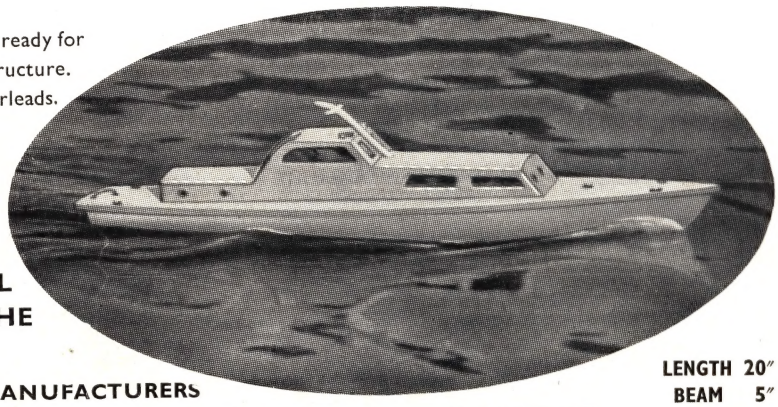

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